## SHARP

## ELECTRONIC CASH REGISTER

ELEKTRONISCHE REGISTRIERKASSE CAISSE ENREGISTREUSE ELECTRONIQUE CAJA REGISTRADORA ELECTRONICA

MODEL $\left.\begin{array}{l}\text { MODELL } \\ \text { MODELE } \\ \text { MODELO }\end{array}\right) \square \square$

INSTRUCTION MANUAL BEDIENUNGSANLEITUNG

MANUEL D'INSTRUCTIONS MANUAL DE INSTRUCCIONES


## CAUTION:

The cash register should be securely fitted to the supporting platforms to avoid instability when the drawer is open.

## CAUTION:

The socket-outlet shall be installed near the equipment and shall be easily accessible. VORSICHT:
Die Netzsteckdose muß nahe dem Gerät angebracht und leicht zugänglich sein.

## ATTENTION:

La prise de courant murale devra être installée à proximité de l'équipement et devra être facilement accessible.

## AVISO:

El tomacorriente debe estar instalado cerca del equipo y debe quedar bien accesible.

## VARNING:

Det matande vägguttaget skall placeras nära apparaten och vara lätt åtkomligt.

## CAUTION:

For a complete electrical disconnection pull out the mains plug.

## VORSICHT:

Zur vollständigen elektrischen Trennung vom Netz den Netzstecker ziehen.

## ATTENTION:

Pour obtenir une mise hors-circuit totale, débrancher la prise de courant secteur.
AVISO:
Para una desconexión eléctrica completa, desenchufar el enchufe de tomacorriente.

## VARNING:

För att helt koppla från strömmen, dra ut stickproppen.

This equipment complies with the requirements of Directives $89 / 336 / E E C$ and $73 / 23 /$ EEC as amended by 93/68/EEC.
Dieses Gerät entspricht den Anforderungen der EG-Richtlinien 89/336/EWG und 73/23/EWG mit Änderung 93/68/EWG.
Ce matériel répond aux exigences contenues dans les directives 89/336/CEE et 73/23/CEE modifiées par la directive 93/68/CEE.
Dit apparaat voldoet aan de eisen van de richtlijnen 89/336/EEG en 73/23/EEG, gewijzigd door 93/68/EEG.
Dette udstyr overholder kravene i direktiv nr. 89/336/EEC og 73/23/EEC med tillæg nr. 93/68/EEC.
Quest' apparecchio è conforme ai requisiti delle direttive 89/336/EEC e 73/23/EEC, come emendata dalla direttiva 93/68/EEC.


Este equipamento obedece às exigências das directivas 89/336/CEE e 73/23/CEE, na sua versāo corrigida pela directiva 93/68/CEE.
Este aparato satisface las exigencias de las Directivas 89/336/CEE y 73/23/CEE, modificadas por medio de la 93/68/CEE.
Denna utrustning uppfyller kraven enligt riktlinjerna 89/336/EEC och 73/23/EEC så som komplette ras av 93/68/EEC.
Dette produktet oppfyller betingelsene i direktivene 89/336/EEC og 73/23/EEC i endringen 93/68/EEC.
Tämä laite täyttää direktiivien 89/336/EEC ja 73/23/EEC vaatimukset, joita on muutettu direktivillä 93/68/EEC.

## INTRODUCTION

Thank you very much for your purchase of the SHARP Electronic Cash Register, Model XE-A201 Please read this manual carefully before operating your machine in order to gain full understanding of functions and features.
Please keep this manual for future reference. It will help you if you encounter any operational problems.

## CAUTION!

Never install the batteries into the cash register before initializing it. Before you start operating the cash register, you must first initialize it, then install three new R6 or LR6 batteries ("AA" size) on the register. Otherwise, distorted memory contents and malfunction of the cash register will occur. For this procedure, please refer to page 7.

## IMPORTANT

- Be very careful when removing and replacing the printer cover, as the cutter mounted on it is very sharp.
- Install the cash register in a location not subject to direct sunlight, unusual temperature changes, high humidity or splashing water.
Installation in such locations could cause damage to the cabinet and the electronic components.
- Never operate the register with wet hands.

The water could seep into the interior of the register and cause component failure.

- When cleaning your register, use a dry, soft cloth. Never use solvents, such as benzine and/or thinner.
The use of such chemicals will lead to discoloration or deterioration of the cabinet.
- The register plugs into any standard wall outlet (official (nominal) voltage).

Other electrical devices on the same electrical circuit could cause the register to malfunction.
-For protection against data loss, please install three R6 or LR6 batteries ("AA" size) after initializing the cash register. When handling the batteries, please observe the following: Incorrectly using batteries can cause them to burst or leak, possibly damaging the interior of the cash register.

- Be sure that the the positive (+) and negative (-) poles of each battery are facing in the proper direction for installation.
- Never mix batteries of different types.
- Never mix old batteries and new ones.
- Never leave dead batteries in the battery compartment.
- Remove the batteries if you do not plan to use the cash register for long periods.
- Should a battery leak, clean out the battery compartment immediately, taking care to avoid letting the battery fluid come into direct contact with your skin.
- For battery disposal, follow the corresponding law in your country.
- For complete electrical disconnection, disconnect the main plug.

For Easy Set-up, see
"GETTING STARTED" (page 7).

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## PARTS AND THEIR FUNCTIONS

1 External View


2 Printer


The printer is one station type thermal printer, and therefore it does not require any type of ink ribbon or cartridge.

Lift the rear of the printer cover to remove. To re-install, hook the pawls on the cabinet and close.

Caution: The paper cutter is mounted on the cover. Be careful not to cut yourself.


## Print head release lever

The print head can be lifted off the roller by the print head release lever (light green lever on the right side of the printer). Pulling the lever toward you moves the print head away from the roller. If the paper becomes jammed, you will need to use this lever to release the print head from the paper to remove the jammed paper.

[^0] in damage to the printer and print head.

## 3 Mode Switch and Mode Keys

The mode switch can be operated by inserting one of the two supplied mode keys - manager (MA) and operator (OP) keys. These keys can be inserted or removed only in the "REG" or " $\downarrow$ " position.


The mode switch has these settings:
৬: $\quad$ This mode locks all register operations. (AC power turns off.) No change occurs to register data.
OP X/Z: To take individual clerk $X$ or $Z$ reports, and to take flash reports. It can be used to toggle receipt state "ON" and "OFF" by pressing the RCPTPO key.
REG: For entering sales.
PGM: To program various items.
$\infty$ : Enters into the void mode. This mode allows correction after finalizing a transaction.
MGR: For manager's entries. The manager can use this mode for an override entry.
X1/Z1: $\quad$ To take the $X / Z$ report for various daily totals
$\mathbf{X 2} / \mathbf{Z 2}: \quad$ To take the $X / Z$ report for periodic (weekly or monthly) consolidation

## 4 Keyboard

## Keyboard layout



Note
The small characters on the bottom or lower right in each key indicates functions or characters which can be used for character entries for text programming. For details, refer to page 33.

Key names

| $\uparrow$ | Paper feed key | (囚) | Multiplication key | AMT Am | Amount key |
| :---: | :---: | :---: | :---: | :---: | :---: |
| RA | Received-on account key | - | Decimal point key | Auto Aut | Automatic sequence key |
| ${ }_{\text {RCPT }}$ | Receipt print/Paid-out key | (CL) | Clear key | VAT Va | Value added tax key |
| $\infty$ | Void key |  | 0 ~ (9umeric keys | CR1 CR2 | Credit 1 and 2 keys |
| ESC | Escape key | P10, | PLU/Subdepartment key | CH Ch | Cheque key |
| EX | Foreign currency exchange key | $\begin{array}{\|c} \hline \text { DETT } \\ \# \\ \hline \end{array}$ | Department code entry key | \#/TM/ST | Non-add code/Time display /Subtotal key |
| \%1 | \%2 Percent 1 and 2 keys | ERPT <br> SHIFT | Department shift key | TL/NS | Total/No sale key |
| RF | Refund key | CLK\# | Clerk code entry key |  |  |
| $\Theta$ | Discount key | ${ }^{17}$ | $4^{32}$ Department keys |  |  |

5 Displays

Operator display


Customer display (Pop-up type)


Amount: Appears in the far-right eight (max.) positions. When the amount is negative, the minus symbol "-" appears before the amount.
Number of repeats for repetitive registrations:
The number of repeats is displayed, starting at " 2 " and incremental with each repeat. When you have registered ten times, the display will show " 0. " $(2 \rightarrow 3 \cdots \cdots, 0 \rightarrow 1 \rightarrow 2 \cdots$ )

## Receipt function status:

The indicator " "" appears in the RCPT OFF position when the receipt function is in the OFF status.
Time: Appears in the second to sixth positions (using 24-hour format) in the OP X/Z, REG or MGR mode. In the REG or MGR mode, press the \#/TMST key to display the time.

## - Machine state symbols

$P$ : Appears during programming.
E : Appears when an error is detected.
a: Appears when the subtotal is displayed or when the amount tendered is smaller than the sales amount.
[ : Appears when the EX key is pressed to calculate a subtotal in foreign currency.
$F$ : Appears when a transaction is finalized by pressing the $\mathrm{TL} / \mathrm{NS}, \mathrm{CH}, \mathrm{CR11}$ or CR2 key.
[: Appears when the change due amount is displayed.
$E-E$ : Appears in the far-left three positions at the timing of key entry when the electronic journal (EJ) memory is full. (Depending on programming.)
$L$ : Appears when the voltage of the installed batteries is under the required level. You must replace with new ones within two days. Refer to page 63 for details.
L: Appears when the batteries are not installed, or the installed batteries are dead. You must replace with new ones immediately. Refer to page 63 for details.

- : May appear right below the eighth and ninth places at the timing of finalization of a transaction when the electronic journal (EJ) memory is nearly full.
Also appears right below the tenth place when power save mode is effective.
$E-E U$ : Appears when programmed date (and time) for EURO modification operation is come.
$H$ : Appears when the print head release lever is in the lifted position.



## 6 Drawer Lock Key

This key locks and unlocks the drawer. To lock it, turn 90 degrees counterclockwise. To unlock it, turn 90 degrees clockwise.


## GETTING STARTED

Please follow the procedure shown below. The batteries are not installed and the power is "OFF".

## Installing the cash register

Find a stable surface near an AC outlet where the cash register will not subject to water sources or direct sunlight.

2Initializing the cash register

In order for the cash register to operate properly, you must initialize it before operating for the first time. Follow this procedure.

1. Insert the manager (MA) key into the mode switch and turn it to the REG position.
2. Insert the plug of the $A C$ power cord into the $A C$ outlet. The buzzer will sound three times.
IMPORTANT: This operation must be performed without batteries installed.

3. The cash register has now been initialized. The register display will show " 0.00 " with " $L$ ".


If the buzzer does not sound when the plug is inserted, the initialization has not been done successfully. (This will occur when the voltage is high because you operated the cash register before starting initialization.) Wait at least one minute after pulling out the plug and insert the plug again.

## 3 <br> Installing batteries

Three new R6 or LR6 batteries ("AA"size) must be installed in the cash register to prevent the data and user-programmed settings from being erased from the memory, when the power cord is accidentally disconnected or in case of power failure. Once installed, the batteries will last approximately one year before needing replacement. At this time, the " $L$ " symbol will appear on the display to indicate the batteries are low and must be replaced within two days. If the no battery symbol " $L$ " appears, you must install the batteries at once.

Install three new R6 or LR6 batteries ("AA"size) according to the procedure shown below with the power cord connected and set to the REG position:

1. Lift the rear of the printer cover and detach it. Be careful with the paper cutter, so as not to cut yourself.
2. Open the battery compartment cover.

3. Install three new R6 or LR6 batteries ("AA"size) as per the diagram. When the batteries are properly installed " $L$ " on the display will disappear.
4. Close the battery compartment cover.

Note
Be sure to observe precautions shown on page 1 when handling batteries.


## Installing a paper roll

Precaution: The paper cutter is mounted on the printer cover. Take caution when removing and installing the cover.

The register can print receipts or journals. For the printer, you must install the paper roll provided with the register, even when you program the register for not printing receipts or journals.
Install the paper roll according to the procedure shown below with the power cord connected and the mode switch set to the REG position:

1. Make sure the print head release lever is positioned as per the diagram.

2. Cut off approximately one revolution of the paper roll. Make sure the paper end is cut as per the diagram.

3. Set the paper in paper roll cradle as per the diagram.

4. Insert the end of the paper into the printer until it is caught by the printer auto-feed and comes out of the top of the printer. If the printer does not catch the paper, feed the paper while pressing the $\uparrow$ key.


## 5. When not using the take-up spool (using as receipt paper):

- Cut off the excess paper using the edge of the inner cover, and replace the printer cover. Press the $\uparrow$ key to make sure the paper end comes out of the printer cover.

Note
If the paper end does not come out, remove the printer cover, and pass the paper end between the paper cutter and the paper guide of the printer cover, and replace the cover.


When using the take-up spool (using as journal paper):

- Insert the end of the paper into the slit in the spool. (Press the $\uparrow$ key to feed more paper if required.)
- Wind the paper two or three turns around the spool shaft.
- Set the spool on the bearing, and press the $\uparrow$ key to take up excess slack in the paper.
- Replace the printer cover.

When using a paper roll as journal paper, you must change the printing style. Refer to "Print Format" in "Various Function Selection Programming 1" section for changing the printing style.


## 5

Programming date, time and VAT/tax

Note
The cash register provides text languages of English, German, French and Spanish. It is preset to English. If you want to change the language, you must change it before programming. Refer to "Language selection" in "Various Function Selection Programming 2" section for changing the language.

Before you can proceed with registration of sales, you must program:

- date • time •VAT/tax

Please refer to the BASIC FUNCTION PROGRAMMING section for details (page 24).

Programming other necessary items
While the cash register is pre-programmed so it can be used with minimal setup, it does provide you with optional functions. Before you start programming, please read through the sales operations section to understand optional functions.

## Settings for introduction of EURO

The cash register can be modified to correspond with each period set for the introduction of EURO. By executing the automatic EURO modification operation, you can easily make the cash register correspond to EURO currency. For details, please refer to "EURO MIGRATION FUNCTION" on page 53.

## Decimal point position (tab) setting for domestic currency

By default, " 2 " is selected. When your country has a different tab setting such as Spain, you must change the setting. Please refer to "Other programming" of "Various Function Selection Programming 1" (Job code 61) on page 43.

## Rounding system

When your country has a special rounding system, such as Australia, Switzerland, Netherlands, Norway, Sweden and Denmark, you must change the setting to suit your country. For the setting for Australia, Switzerland, Netherlands and Norway, please refer to "Other programming" of "Various Function Selection Programming 1" (Job code 67) on page 45. For the setting for Sweden and Denmark, please refer to "Other programming" of "Various Function Selection Programming 1" (Job code 69) on page 46.

## VAT/tax

The cash register provides 6 kinds of VAT/tax. Select an appropriate VAT/tax system first, then set tax rates (up to 4 rates) and assign taxable status to departments. By default, taxable 1 is assigned to all departments.

## Starting sales entries

Now you are ready for sales registration.

## BASIC SALES ENTRY

## 1 Basic Sales Entry Example

Listed below is a basic sales entry example when selling items by cash. For operation details, please refer to each section.

## Mode switch setting

1. Turn the mode switch to the REG position.

## Clerk assignment

2. Enter your clerk code. (For example, clerk code is 1. Press the (1) and CLK\#\# key
 in this order.)

## Item entries

3. Enter the price for the first department item. (For example, for 15.00 , enter (1) 500 , and press the appropriate department key).

For department 17 to department 32, press the DEPTSHIFT key first before pressing the department key. For department 33 and above, enter the price and press the AMT key, then enter the department code using numeric keys and press the DEPT\# key.
4. Repeat step 3 for all department items.

## Displaying subtotals

5. Press the \#/TM/ST key to display the amount due.

## Finalizing the transaction

6. Enter the amount received from the customer. (You can omit this step if the amount tendered is the same as the subtotal.)
7. Press the TL/NS key, and the change due is displayed and the drawer is opened.
8. Tear off the receipt and give it to the customer with his or her change.
9. Close the drawer.

Key operation example

(In this example, tax system is set to automatic VAT 1-4 and the tax rate is set to $6.25 \%$.)

Print

| SHARP PRESENTS THE XE-A201 SHARP IS THE BEST | Logo message |
| :---: | :---: |
| $\begin{array}{ll} \text { 30/08/2002 11:23 } \\ \text { 123456\#0379 DAVID } \\ \end{array}$ | - Date/Time/Clerk code <br> - Register number <br> /Consecutive number/Clerk name |
| DEPT. 01 *15.00 | Hems |
| DEPT. 02 *23.00 |  |
| SUBTOTAL *38.00 |  |
| TAXI ST *38.00 | Not printed when |
| VAT 1 *2.24 |  |
| NET 1 *35.76 | 」ncorab |
| ITEMS 20 | Total quantity |
| ***TOTAL *38. 00 | - Total amount |
| CASH $\quad * 40.00$ | - Cash tendering/amount received |
| CHANGE *2.00 | Change |

## Clerk assignment

Prior to any item entries, clerks must enter their clerk codes into the register. However, the code entry may not be necessary when the same clerk handles the consecutive transactions.

- Sign-on (in REG, MGR, $\infty$ mode)


Sign-off (in REG, MGR, $\infty$ mode)

CLK\# $\longrightarrow$ CLK\#

## Receipt ON/OFF function

When you use the printer to issue receipts, you can disable receipt printing in the REG mode to save paper using the receipt ON/OFF function. To disable receipt printing, press the Recripe key in the OP X/Z position. This key toggles the receipt printing status ON and OFF.
To check the receipt printing status, turn the mode switch to the OP X/Z position or press the © (Cley in the REG mode. When the function is in the OFF mode, the receipt off indicator " $\quad$ " illuminates.
The register will print reports regardless of the receipt state, so the paper roll must be installed.

## To issue a receipt when receipt ON/OFF function is set to OFF:

If your customer wants a receipt after you finalized a transaction with the receipt ON/OFF function being OFF status, press the fостpo key. This will produce a receipt. However, if more than 30 items were entered, the receipt will be issued in a summary receipt.

## Copy receipt

You can print a copy receipt by pressing the hectrpo key when the receipt ON/OFF function is in the "ON" status. To realize this function, you must enable the function. Please refer to page 44

## Power Save Mode

The register will enter into power save mode when no entries are performed based on the pre-programmed time limit (by default, 30 minutes).
When the register goes to the power save mode, all display lights will turn off except the decimal point at the leftmost position. The register will return to the normal operation mode when any key is pressed or a mode is changed with the mode key. Please note when the register is recovered by a key entry, its key entry is invalid. After the recovery, start the key entry from the beginning.

## 2 Error Warning

In the following examples, your register will go into an error state accompanied with a warning beep and an error symbol " $E$ " on the display. Clear the error state by pressing the (CL) key and take the proper action.
Please refer to the error code table on page 67.

- Enter over a 32 -digit number (entry limit overflow): Cancel the entry and re-enter the correct number.
- An error in key operation: Clear the error and continue operation.
- An entry beyond a programmed amount entry limit: Check to see if the entered amount is correct. If it is correct, it can be rung up in the MGR mode. Contact your manager.
- An including-tax subtotal exceeds eight digits: Delete the subtotal by pressing the (CL) key and press the TL/NS, (CH), CR1) or (CR2 key to finalize the transaction.


## Error escape function

To quit a transaction due to an error or an unforeseen event, use the error escape function as shown below:


The transaction is voided (treated as a subtotal void) and the receipt is issued by this function. If you have already entered a tendered amount, the operation is finalized as a cash sale.

## 3 Item Entries

## - Single item entries

## 1. Department entries

For a merchandise classification, the cash register provides a maximum of 50 departments. To the departments, group attributes such as taxable status are applied to items when they are entered.

## - When using the department keys (for department 1 to 32)

For department 1 to 16 , enter a unit price and press a department key. If you use a programmed unit price, press a department key only.
 programmed unit price, press the (EEPSHHFI key and press a department key.

When using a programmed unit price

${ }^{*_{1}}$ Less than the programmed upper limit amounts When zero is entered, only the sales quantity is added.
*2 For the departments 17 through 32, press the department shift key.

## Note

Please note if you press the same key after using the बEPTSHIFT key, it acts as a repeat entry. For example, when you register an item of dept. 17 using the DEPTSHFT key and then an item of dept. 1 using the preset unit price, you should use the department code entry key described below for the dept. 1 item. If you just press the $1^{17}$ key to register dept. 1 item, it will act as a repeat entry of dept. 17 item.

## - When using the department code entry key

Enter a unit price and press the AMT key, then enter a department (dept.) code and press the DEPT\# key. If you use a programmed unit price, enter a dept. code and press the DEPT\# key.

When using a programmed unit price

> ${ }^{*}$ Less than the programmed upper limit amounts When zero is entered, only the sales quantity is added.

## 2. PLU/subdepartment entries

For another merchandise classification, the cash register provides a maximum of 1200 PLUs/subdepartments. PLUs are used to call up preset prices by a code entry. Subdepartments are used to classify merchandise into smaller groups under the departments. Every PLU and subdepartment has a code from 1 to 1200, and should belong to a department to obtain attributes of that department.

By default, the cash register is preprogrammed to be able to use 1 to 200 codes, and these 200 codes are set to PLU mode and zero for unit price.
To extend the number of PLU codes to 1200, please refer to "EJ memory type" on page 40, and for other PLU/subdepartment programming, refer to "PLU/Subdepartment Programming" on page 28.

## - PLU entries

PLU code $\longrightarrow$ PLU/SUB

## - Subdepartment (open PLU) entries



* Less than the programmed upper limit amounts
When zero is entered, only the sales quantity is added.


Print

| DEPT. 12 | *12.00 |
| :---: | :---: |
| DEPT. 17 | *5.00 |
| DEPT. 14 | *8. 25 |
| DEPT. 18 | *3. 25 |
| DEPT. 50 | *15.00 |
| DEPT. 33 | *2.50 |
| PLU. 0002 | *1.50 |
| PLU. 0011 | *12.00 |
| $\begin{aligned} & \text { ITEMS } \\ & \text { CASH } \end{aligned}$ | 50 |

## Repeat entries

You can use this function for entering a sale of two or more of the same items. Consecutive pressing of a department key, (OEPTA key or PLUSUB key is as shown on key operation example below.


| Print |  |
| :---: | :---: |
| DEPT. 12 | *12.00 |
| DEPT. 12 | *12.00 |
| DEPT. 17 | *5.00 |
| DEPT. 17 | *5.00 |
| DEPT. 14 | *8. 25 |
| DEPT. 14 | *8. 25 |
| DEPT. 18 | *3. 25 |
| DEPT. 18 | *3. 25 |
| DEPT. 50 | *15.00 |
| DEPT. 50 | *15.00 |
| DEPT. 33 | *2. 50 |
| DEPT. 33 | *2. 50 |
| PLU. 0002 | *1. 50 |
| PLU. 0002 | *1.50 |
| PLU. 0011 | *12.00 |
| PLU. 0011 | *12.00 |
| ITEMS CASH |  |
|  | 9. 00 |

## - Multiplication entries

When selling a large quantity of items, it is convenient to use the multiplication entry method. Enter quantity using numeric keys and press the $\otimes$ key before starting item entry as shown in the example below.

## Note

When programmed to allow fractional quantity entries, you can enter up to four integers and three digit decimal, though the quantity is counted as one for sales reports. To enter a fractional quantity, use the decimal point key between integer and decimal, as $7 \bigcirc 5$ for entering 7.5.


Print

| 3x 12.00 |  |
| :---: | :---: |
| DEPT. 12 | *36.00 |
| 5x 5.00 |  |
| DEPT. 17 | *25.00 |
| 3×8.25 |  |
| DEPT. 14 | *24.75 |
| 5x 3.25 |  |
| DEPT. 18 | *16. 25 |
| 3x 15.00 |  |
| DEPT. 50 | *45.00 |
| 5x 2.50 |  |
| DEPT. 33 | *12.50 |
| 3x 1.50 |  |
| PLU. 0002 | *4. 50 |
| 5x 12.00 |  |
| PLU. 0011 | *60.00 |
| ITEMS 320 |  |
| *224. 00 |  |

## Single item cash sale (SICS) entry

- This function is useful when a sale is for only one item and is for cash. This function is applicable only to those departments that have been set for SICS or to their associated PLUs or subdepartments.
- The transaction is complete and the drawer opens as soon as you press the department key, DEPT\# key or PLU/SUB key.
$\underset{\substack{\text { For finishing } \\ \text { the transaction }}}{250}$

Print

| Print |  |  |
| :--- | :--- | :--- |
| DEPT. 09 |  | $* 2.50$ |
| ITEMS | 10 |  |
| CASH | $* 2.50$ |  |

Note
If an entry to a department or PLU/subdepartment set for SICS follows the ones to departments or PLUs/subdepartments not set for SICS, it does not finalize and results in a normal sale.

## 4 Displaying Subtotals

The subtotal is displayed by pressing the \#/TMST key. When you press it, the subtotal of all entries which have been made is displayed and the symbol " $\square$ " will light up in the display.

Note
Subtotal will not be printed on a receipt on the current factory setting. If you want to print it, change the setting by programming. Refer to "Receipt print format" (Job code 7) on page 43.

## 5 Finalization of Transaction

## Cash or cheque tendering

Press the \#/TMST key to get a subtotal, enter the amount tendered by your customer, then press the TL/NS key if it is a cash tender or press the CH key if it is a cheque tender. When the amount tendered is greater than the amount of the sale, the register will show the change due amount and the symbol " $[$ " will light up. Otherwise the register will show a deficit and the symbol " $\square$ " will light up. You now must make a correct tender entry.

Cash tendering
Key operation example


Cheque tendering


| Print |  |  |
| :--- | :--- | :--- |
| ITEMS | 10 |  |
| ***OTOTAL | $* 7.35$ |  |
| CHECK | $* 10.00$ |  |
| CHANGE | $* 2.65$ |  |

## Cash or cheque sale that does not require tender entry

Enter items and press the TL/NS key if it is a cash sale or press the CH if it is a cheque sale. The register will display the total sale amount.


## - Credit sale

Enter items and press a credit key ( $\mathrm{CR1}$ or (CR2).

| Key operation example | Print |  |
| :---: | :---: | :---: |
| $\begin{aligned} & 2500 \frac{6^{222}}{7^{229}} \\ & \hline 2500 \text { CR1) } \end{aligned}$ | DEPT. 06 | *25.00 |
|  | DEPT. 07 | *32.50 |
|  | $\begin{aligned} & \text { ITEMS } \\ & \text { CREDIT1 } \end{aligned}$ | $50$ |

## Mixed-tender sale

You can perform mixed-tendering of cheque and cash, cash and credit, and cheque and credit.

Key operation example


| Print |  |
| :---: | :---: |
| ITEMS | 30 |
| ***TOTAL | *49. 50 |
| CASH | *9. 50 |
| CREDIT2 | *40.00 |

## 6 Computation of VAT (Value Added Tax)/tax

## - VAT/ tax system

The cash register may be programmed for the following six VAT/tax systems. The cash register is preprogrammed as automatic VAT 1-4 system.

## Automatic VAT 1-4 system (Automatic operation method using programmed percentages)

This system, at settlement, calculates VAT for taxable 1 through 4 subtotals by using the corresponding programmed percentages.

Automatic tax 1-4 system (Automatic operation method using programmed percentages)
This system, at settlement, calculates taxes for taxable 1 through 4 subtotals by using the corresponding programmed percentages, and also adds the the calculated taxes to those subtotals, respectively.

Manual VAT 1-4 system (Manual entry method using programmed percentages)


This system provides the VAT calculation for taxable 1 through 4 subtotals. This calculation is performed using the corresponding programmed percentages when the VAT key is pressed just after the \#/TMST key.

Manual VAT 1 system (Manual entry method for subtotals that uses VAT 1 preset percentages)


This system enables the VAT calculation for the then subtotal. This calculation is performed using the VAT 1 preset percentages when the VAT key is pressed just after the \#TMST key. For this system, the keyed-in tax rate can be used.

Manual tax 1-4 system (Manual entry method using preset percentages)


This system provides the tax calculation for taxable 1 through 4 subtotals. This calculation is performed using the corresponding programmed percentages when the VAT key is pressed just after the \#\#/TMST key. After this calculation, you must finalize the transaction.

## Automatic VAT 1 and automatic tax 2-4 system

This system enables the calculation in the combination with automatic VAT 1 and automatic tax 2 through 4 . The combination can be any of VAT1 corresponding to taxable 1 and any of tax 2 through 4 corresponding to taxable 2 through taxable 4 for each item. The tax amount is calculated automatically with the percentages previously programmed for these taxes.

## Note

- The tax status of PLU/subdepartment depends on the tax status of the department which the PLU/subdepartment belongs to.
- VAT/tax assignment symbol can be printed at the fixed right position near the amount on the receipt as follows:


When the multiple VAT/tax is assigned to a department or a PLU, a symbol of the lowest number assigned to VAT/tax rate will be printed. For programming, please refer to "Various Function Selection Programming 1"(Job code 66) on page 44.

## OPTIONAL FEATURES

## 1 Auxiliary Entries

## Percent calculations (premium or discount)

Your register provides the percent calculation for the subtotal and/or each item entry depending on the programming.

- Percentage: 0.01 to $100.00 \%$ (Application of preset rate (if programmed) and manual rate entry are available.)


## Percent calculation for subtotal

| Key operation example |
| :---: |
| $4 \otimes^{(8)}$ |
| $1405^{5}$ |
| $5707^{20}$ |
| \#/TMST |
| 10 \% $\%$ |
| TL/NS |


| Print |  |
| :---: | :---: |
| 4× 1.40 |  |
| DEPT. 05 | *5. 60 |
| DEPT. 07 | *5.70 |
| SUBTOTAL | *11.30 |
|  | -10\% |
| \%1 | -1. 13 |
| ITEMS |  |
| CASH | . 17 |


(When premium and $15 \%$ are programmed for the \%2 key)

Print

| DEPT. 06 | *8.00 |
| :---: | :---: |
| \%1 | -7.56 |
| PLU. 0015 | *5.00 |
|  | 15.00\% |
| \%2 | *0.75 |
| $\begin{aligned} & \text { ITEMS } \\ & \text { CASH } \end{aligned}$ | $\begin{gathered} 20 \\ * 13.15 \end{gathered}$ |

## Deduction entries

Your register allows you to deduct a preset amount or a certain amount manually entered, which are less than a programmed upper limit. These calculations can be after the entry of an item and/or the computation of subtotal depending on the programming.

## Deduction for subtotal



| Print |  |
| :---: | :---: |
| DEPT. 06 | *5. 75 |
| PLU. 0010 | *7. 15 |
| SUBTOTAL | *12.90 |
| (-) | -1.00 |
| $\begin{aligned} & \text { IIEMS } \\ & \text { CASH } \end{aligned}$ | $1.90$ |

## Deduction for item entries

Key operation example

(When a deduction amount of 0.75 is programmed.)

| Print |  |  |
| :---: | :---: | :---: |
| DEPI. 07 |  | $* 6.75$ |
| $(-)$ |  | -0.75 |
| ITEMS | 10 |  |
| CASH | *G. | 00 |

## Refund entries

For a refund of a department item, start with entering the refund amount and press the RF key, then press the corresponding department key (in case of department 17 to 32 , press the ©erTsHff key and press the corresponding department key, and in case of department 33 to 50 , enter the refund amount and press the AATT key, then enter the department code, press the RF key and press the (EEPTIA key).
For a refund of a PLU item, enter the PLU code and press the RF key, then press the PLUSUB key.
For a refund of a subdepartment item, enter the refund amount and press the AMT key, then enter the PLU code, press the RF key and press the PLUSUB key.

| Key operation example | Print |  |
| :---: | :---: | :---: |
| 250 RF $6^{22}$ | DEPT. 06 | R-2. 50 |
| 100 AMTT 35 RF [beprie | DEPT. 35 | R-1.00 |
| 7 (8) | -7x 2.10 |  |
| 13 RF PLUSUB | PLU. 0013 | R-14.70 |
| 150 AMTT 11 RF PLUSUB | PLU. 0011 | R-1.50 |
| TL/NS | $\begin{aligned} & \text { ITEMS } \\ & \text { CHANGE } \end{aligned}$ | 9. 70 |

## Non-add code number entries and printing

You can enter a non-add code number such as a customer's code number and credit card number, a maximum of 16 digits, at any point during the entry of a sale. The cash register will print it at once.
To enter a non-add code number, enter the number and press the \#/TMST key.

| Key operation example | Print |
| :---: | :---: |
| 1230 \#\#TMST | \#0000000000001230 |
| $1500{ }^{22}$ | DEPT. 06 *15.00 |
| (CR1 | $\begin{array}{ll} \text { ITEMS } & 10 \\ \text { CREDIT1 } & * 15.00 \end{array}$ |

## 2 Auxiliary Payment Treatment

## - Currency exchange


*Exchange rate: 0.000000 to 999.999999

[^1]
## Applying preset exchange rate




## Applying manual exchange rate



| Print |  |  |
| :--- | ---: | ---: |
| DEPT.06 | $* 23.00$ |  |
| DEPT.07 |  | $* 46.50$ |
| ITEMS | 20 |  |
| ***OTAL | $* 69.50$ |  |
| EXCH2 | 1.275 |  |
| CASH | 88.62 |  |
| CHANGE |  | 100.00 |
|  |  | $* 8.92$ |

## Received-on account entries

When you receive on account from a customer, use the RA key. For the received-on-account (RA) entry, enter the amount, and press the RA key.

Note Cash tendering only available for RA operation.

Key operation example

$$
\begin{array}{r}
12345 \text { \#TTMST } \\
4800 \text { RA }
\end{array}
$$



## Paid-out entries

When you pay an amount to a vendor, use the FCOTPO) key. For the paid-out (PO) entry, enter the amount and press the BCOPTPO key.

Note Cash tendering only available for $P O$ operation.

| Key operation example | Print |  |
| :---: | :---: | :---: |
| 54321 \#\#/TMST |  | \#0000000000054321 |
| 2300 \% ¢отTP) | ***PO | *23.00 |

## ■ No sale (exchange)

When you need to open the drawer with no sale, press the TL/NS key. The drawer will open and printer will print "NO SALE" on the receipt or journal. If you let the machine print a non-add code number before pressing the TL/NS key, a no sale entry is achieved and a non-add code number is printed.
\#0000000000045678 NO SALE

## 3 Automatic Sequencing Key (AUTO key) Entries

You can achieve a programmed transaction simply by pressing the auro key.

Key operation example
AuTO
$\left(\boxed{\text { AUTO }}=5006^{22} \mathrm{TL} / \mathrm{NS}\right)$

Print

| DEPT. 06 |  | $* 5.00$ |
| :--- | :--- | :--- |
| ITEMS | 10 |  |
| CASH | $* 5.00$ |  |

## CORRECTION

## 1 Correction of the Last Entry (direct void)

If you make an incorrect entry relating to a department, PLU/subdepartment, percentage (\%1 and \%2), discount $(\Theta)$ or refund, you can void this entry by pressing the $\qquad$ key immediately after the incorrect entry.

Key operation example


Print

| DEPT. 06 | *12.50 |
| :---: | :---: |
| DEPT. 06 | $n-12.50$ |
| PLU. 0002 | *1.50 |
| PLU. 0002 | $n-1.50$ |
| DEPT. 08 | *6.00 |
|  | 15.00\% |
| \%2 | *0.90 |
| \%2 | $0-0.90$ |
| DEPT. 09 | *3. 28 |
| (-) | -0.28 |
| (-) | ต*0.28 |
| DEPT. 06 | R-2.50 |
| DEPT. 06 | Row2.50 |
| ITEMS | 20 |
| CASH | *9. 28 |

## 2 Correction of the Next-to-last or Earlier Entry (indirect void)

You can void any incorrect department entry, PLU/subdepartment entry or item refund entry made during a transaction if you find it before finalizing the transaction (e.g. pressing the TL/NS key). This function is applicable to department, PLU/subdepartment and refund entries only.
Press the $\infty$ key just before you press a department key, ©EPTi\# key or PLUSUB key. For the refund indirect void, press the $\infty$ key after you press the RF key.

Key operation example


Print

| DEPT. 06 | *13.10 |
| :---: | :---: |
| DEPT. 07 | *17.55 |
| PLU. 0010 | *7. 15 |
| PLU. 0012 | *3.60 |
| DEPT. 06 | R-2.50 |
| DEPT. 07 | *8. 25 |
| DEPT. 06 | $n-13.10$ |
| PLU. 0012 | $n-3.60$ |
| DEPT. 06 | Ru**2. 50 |
| $\begin{aligned} & \text { ITEMS } \\ & \text { CASH } \end{aligned}$ | $\text { 2. } 95$ |

## 3 Subtotal Void

You can void an entire transaction. Once subtotal void is executed, the transaction is aborted and the register issues a receipt. This function does not work when more than 30 items have been entered.

Key operation example


Print

| DEPT.02 | $* 13.10$ |
| :--- | ---: |
| DEPI.02 | $* 13.10$ |
| DEPT.06 | $* 17.55$ |
| PLU. 0010 | $* 7.15$ |
| PLU. |  |
| SUBTOTAL | $* 10.00$ |
| SBTL © | $* 60.90$ |
| ***TOTAL | $* 0.90 .90$ |

## 4

 Correction of Incorrect Entries not Handled by the Direct or Indirect Void FunctionAny errors found after the entry of a transaction has been completed or during an amount tendered entry cannot be voided. These errors must be corrected by the manager.
The following steps should be taken:

1. If making the amount tendered entry, finalize the transaction.
2. Make correct entries from the beginning.
3. Hand the incorrect receipt to the manager for its cancellation.

## PRIOR TO PROGRAMMING

Before starting sales entries, you must first program necessary items so the cash register suits your sales needs. In this manual, there are three sections, BASIC FUNCTION PROGRAMMING where required items must be programmed, AUXILIARY FUNCTION PROGRAMMING where you can program for more convenient use of keys on the keyboard, and ADVANCED FUNCTION PROGRAMMING where various optional programming features are provided. Find the appropriate features for your needs, and make the necessary programming.

## Note

You can select the language of text (English, German, French or Spanish) printed on receipts or journals. For the language selection, please refer to "Language Selection" described later in this section.

## Procedure for programming

1. Check to see whether the paper roll is present in the machine. If there is not enough paper on the roll, replace it with a new one (refer to MAINTENANCE section for the replacement).
2. Put the manager key in the mode switch and turn it to the PGM position.
3. Program necessary items into the cash register.

Every time you program an item, the cash register will print the setting. Please refer to print samples in each section.

4. If necessary, issue programming reports for your reference.

## Note

- On the key operation example shown in the programming details, numbers such as "26082002" indicates the parameter which must be entered using the corresponding numeric keys.
- Asterisks in the tables shown in the programming details indicate default settings.


## BASIC FUNCTION PROGRAMMING (For Quick Start)

## 1 Date and Time Programming

## ■ Date

For setting the date, enter the date in 8 digits using the day-month-year (DD/MM/YYYY) format, then press the \#/TMST key.

## Procedure

Date(DD/MM/YYYY) $\longrightarrow \# / T M / S T$
$\qquad$
Key operation example
26082002 \#\#TMST
(26 Aug., 2002)

Print


## Note

You can use the date format of month-day-year (MM/DD/YYYY) or year-month-day (YYYY/MM/DD) format. To change the format, refer to "Various Function Selection Programming 1" section (Job code 61).

## - Time

For setting the time, enter the time in 4 digits using the 24-hour format. For example, when the time is set to 2:30 AM, enter 230; and when it is set to 2:30 PM, enter 1430 .

## Procedure

Time(max. 4 digits in 24-hour format) $\longrightarrow \# /$ TM/ST

## Key operation example

$$
1430 \text { \#/TM/ST }
$$

Print


In the display, current time is displayed in 24-hour format. If you want to display time in the 12-hour format, refer to "Various Function Selection Programming 1" section (Job code 61). In the 12-hour format, " $\square$ " for $A M$ time and " $\square$ " for $P M$ time will appear in the rightmost position with the current time.

## 2 Tax Programming

If you program the VAT/tax, the cash register can calculate the sales tax. In the VAT system, the tax is included in the price you enter in the register, and the tax amount is calculated when tendered according to the VAT rate programmed. In the tax system, the tax is calculated when tendered according to the tax rate programmed, and added to the price. The cash register can provide totally 6 kinds of VAT/tax systems (automatic VAT1-4, automatic tax 1-4, manual VAT 1-4, manual VAT 1, manual tax 1-4, and automatic VAT1 and automatic tax 2-4 systems) and 4 kinds of rates. By default, the cash register is pre-programmed as automatic VAT1-4 system.

When you program tax rate(s) and taxable status for each department, tax will be automatically added to sales of items assigned to the department according to the programmed tax status for the department and the corresponding tax rate(s).

For details of the tax systems, refer to "Computation of VAT (Value Added Tax)/tax section on page 17. To change the tax system, please refer "Other programming" of "Various Function Programming 1" section (Job code 69) on page 46.

## Tax rate programming

The percent rate specified here is used for tax calculation on taxable subtotals.

## Procedure


*Sign and tax rate: XYYY.YYYY


Key operation example

| \#/TM/ST | 9 (8) |
| :---: | :---: |
|  | 2 (®) |
|  | 4 (®) |
| 12 | \#/TM/ST |
|  | TL/NS |

Print


Note - The lowest taxable amount is valid only when you select add on tax system. If you select VAT (Value added system), it is ignored.

- If you make an incorrect entry before pressing the third $\otimes$ key in programming a tax rate, cancel it with the (CL) key.
- You do not need to enter the trailing zeros of the tax rate (after the decimal point), but you do need to enter the decimal for fractions.
- If you select VAT system, the sign which you program is ignored.

To delete a tax rate, use the following sequence:
Procedure


## AUXILIARY FUNCTION PROGRAMMING

## 1 Department Programming

Merchandise can be classified into a maximum of 50 departments. Items sold using the department keys can later be printed on a report shown as the quantities sold and sales amounts classified by department. The data is useful for making purchasing decisions and other store operations.

## - Department status


*To program departments 17 through 32, press the department shift key.


To program another department, start from the beginning without pressing the TL/NS key.

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | VAT 4 or tax 4 status | Taxable | 1 |
|  |  | Non-taxable* | 0 |
| B | VAT 3 or tax 3 status | Taxable | 1 |
|  |  | Non-taxable* | 0 |
| C | VAT 2 or tax 2 status | Taxable | 1 |
|  |  | Non-taxable* | 0 |
| D | VAT 1 or tax 1 status | Taxable* | 1 |
|  |  | Non-taxable | 0 |
| E | SICS / Normal | SICS | 1 |
|  |  | Normal* | 0 |
| F | Sign | Negative department | 1 |
|  |  | Positive department* | 0 |
| G | Entry digit limit |  | (default:8) |
| H | Type of unit price entry | Open and preset | 3 |
|  |  | Preset only | 2 |
|  |  | Open only* | 1 |
|  |  | Inhibit department key | 0 |

## VAT/tax status (taxable 1 through 4 / non-taxable)

- When any entry of a taxable department is made in a transaction, tax is automatically computed according to the associated tax rate as soon as the transaction is completed.


## SICS (Single Item Cash Sale)

- If an entry of a department programmed for SICS is made first, the sale will be finalized as a cash sale as soon as the department key is pressed. If the entry is made after entering a department not programmed for SICS, the sale will not be finalized until the TL/NS key is pressed.


## Entry digit limit

- Set the number of allowable digits for the maximum entry amount for each department. The limit is effective for operations in the REG mode and can be overridden in the MGR mode.



## Preset unit price


*To program departments 17 through 32, press the department shift key.


To program another department, start from the beginning without pressing the TL/NS key.

| Key operation example | Print |  |  |
| :---: | :---: | :---: | :---: |
| 1000 | *PGM* |  |  |
| TL/NS | $\begin{aligned} & \text { DO1 } \\ & \text { DEPT. } 01 \end{aligned}$ | It | $\begin{array}{r} 083 \\ 10.00 \\ \hline \end{array}$ |

Note If a department is not programmed to allow the entry of preset unit prices in functional programming, the department is automatically changed to allow the entry of preset unit prices by this programming entry.

## 2 PLU (Price Look-Up) and Subdepartment Programming

The PLU function allows speedy key entries whereby a price is automatically called up when a code is entered. The subdepartment is a kind of "open PLU", which requires you to enter a price after the PLU code is entered. By default, PLU/subdepartment setting for 1 through 200 codes are possible, and can extend to 1200. To extend the number, please refer to "EJ memory type" on page 40.

## - Unit price and associated department assignment


*1: To assign departments 17 through 32, press the department shift key.
When the associated department is department $33-50$ :

*2: For a subdepartment, set the limit amount of unit price entry.
To program the following PLU code, start from entering a unit price or an associated department code without pressing the TL/NS key.
To program another PLU code, start from the beginning without pressing the TL/NS key.

Key operation example
1 PLUSUB
$1253^{10}$
TL/NS

Print


To delete a PLU code, use the following sequence:


## PLU/subdepartment selection

Procedure

*: 0 for subdepartment or 1 for PLU


Note
When you program the last PLU code, the programming sequence will be complete with a press of the \#/TM/ST key.

## 3 Miscellaneous Key Programming

The cash register provides miscellaneous keys such as \%1, \%2, $\Theta, R$, RA, RCPTPO, EX, CH, CR1, CR2 and TL/NS.

Rate for $\% 1$, \%o2 and EX


To program another rate
*: Rate
$0.00-100.00$ (\% rate)
$0.000000-999.999999$ (Currency exchange rate)

Key operation example
$1 \odot 9558 \%$ \%1

TL/NS

Print

| Print |  |
| :---: | :---: |
| $\begin{aligned} & \text { *PGM* } \\ & \text { F02 \% } \end{aligned}$ | 000 |
| L100.00\% | -10.25\% |
| F27 EXCH1 | 002 |
|  | 1.955830 |

Note You must use a decimal point when setting fractional rates.

## Amount for <br> 

Procedure


Key operation example
$200 \Theta$
TL/NS

Print


## Percent rate limitation for <br> $\square$ and

\%2You can program the upper limit of percent rates for percent entries.

## Procedure



Note - Percent entries that exceed the upper limit may be overridden in the MGR mode.

- $10.00 \%$ can be entered as (1) 0 or (1) $0 \times 0) 0$. The $\cdot$ key is needed only for fractional entry.

Key operation example


Print


## Function parameters for $\% 101$, 022 and $\Theta$



| $*:$ | Item: | Selection: |
| :--- | :--- | :--- |
| $\mathbf{A} \quad+/-$ sign | + (premium) sign | Entry: |
|  |  | $-($ discount) sign |

When programming for percent keys, always enter 0 for D.

## +/- sign

- Programming of the +/- sign assigns the premium or discount function for each key.


## Item \% / Item $\Theta$

- Percent/discount calculation for the individual department and PLU


## Subtotal \% / Subtotal $\Theta$

- Percent/discount calculation for the subtotals


## Entry digit limit (For discount key only)

- The entry digit limit is in effect for the REG-mode operations but can be overridden in the MGR mode. The entry digit limit is represented by the number of allowable digit for the maximum entry amount for discount key. When " 0 " is set, open price entry is prohibited.
$\qquad$
Key operation example
1006 (囚)

Print


Function parameters for EX


Key operation example
$102 \otimes 8$
EX TL/NS

Print

| *PGM* |  |
| ---: | ---: |
| F27 EXCH1 | 102 |
|  | 1.955830 | From left, ABC

Function parameters for RA , $\mathrm{BCPTPO}, \mathrm{CH}, \mathrm{CR1}$, $\mathrm{CR2}$ and $\mathrm{TL} / \mathrm{NS}$ (when using as TL key)

## Procedure

To program "0" for all items


| :Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Footer printing* | Allow | 1 |
|  |  | Disallow* | 0 |
| B | Amount tendered entry* | Compulsory | 1 |
|  |  | Non-compulsory (for CH and TL/NS)* | 0 |
|  |  | Inhibit (for CR1 and CR2)* | 0 |
| C | Entry digit limit | For $\mathrm{CHH}^{\text {cher1, }} \mathrm{CR2} 2$ and (TL/NS | 0-8 (default:8) |
|  |  | For $R$ RA and (Ratre) | 0-9 (default:9) |

*When programming for RA or foctpo, always enter 0 for $A$ and $B$.
Footer printing (only for CH , $\mathrm{CR1}$, $\mathrm{CR2}$ and $\mathrm{TL} / \mathrm{NS}$ )

- This programming decides whether or not the machine should print a message at the foot of a receipt when a specified media key is used. With regard to programming method of footer logo message, refer to "Logo messages" section on page 37.
Amount tendered compulsory (only for $\mathrm{CH}, \mathrm{CR1}, \mathrm{CR2}$ and $\mathrm{TL} / \mathrm{NS}$ )
- You may select amount tendered, compulsory or optional, for the $\mathrm{TL} / \mathrm{NS}$ and CH keys.
- You may select amount tendered, compulsory or inhibited, for the CR1 and CR2 keys.


## Entry digit limit

- For the $[\mathrm{CH}$, , $\mathrm{CR1} 1$, , $\mathrm{CR2}$,,$~ \widehat{R A}$ and RCPTPO keys program upper limit entry amount for the tendered amount. For the TL/NS key, program upper limit entry for total cash amount which can be handled on the register. The entry digit limit is in effect for REG-mode operation but can be overridden in the MGR mode. The entry digit limit is represented by the number of allowable digits for the maximum entry or total amount. When " 0 " is set, the operation of the corresponding key is prohibited.

Key operation example



## 4 Text Programming

The register allows you to program text for clerk names, department item names, PLU/subdepartment item names, if necessary. There are two ways for programming text: using character keys on the keyboard or entering character codes with numeric keys on the keyboard.

## Using character keys on the keyboard

You can enter characters according to the small figures printed in the lower right position of the tops. For the layout, please refer to "Keyboard" section on page 5.

The following are used as control keys for character entry:
SHIFT Toggles between upper-case and lower-case letters. By default, the upper-case letter is selected. Once the (sHrf] key is pressed, you are locked in for entering lower-case letters. "„" lights up at the SHIFT position of the display when lower-case letters entry is selected.

DC Toggles between single-size and double-size characters. By default, the single-size character is selected. Once the DC key is pressed, you are locked in for entering double size characters. "_" lights up at the DC position of the display when double-size characters entry is selected.
BS Backs up the cursor, erasing the character to the left.
Example To program the word "Clerk01" with the letter " $C$ " being double size.


## Entering character codes with numeric keys on the keyboard

Numerals, letters and symbols are programmable by entering the character code and the (00) key. (If numeric characters entry is selected, that is, "_" lights up at the NUMBER position of the display, press the NUMBER key to release it.) Set the alphanumeric character code table on the next page. By doing this, you can program characters other than those on the key tops.

- Double-size characters can be made by entering the character code 253.
- All three digits of the character code MUST be entered (even if it starts with zero).


## Example To program the word "SHARP" in double-size characters



When you press an appropriate number key (job code number) and press the $\odot$ key for text entry just after you start programming with the \#/\#TM/ST key, the cash register will automatically be ready for text entry.

## Alphanumeric character code table

| Code | Character | Code | Character | Code | Character | Code | Character | Code | Character |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 001 | á | 046 | . | 091 | Ä | 136 | $\rightarrow$ | 193 | i |
| 002 | â | 047 | / | 092 | Ö | 137 | $\infty$ | 194 | $\dot{G}$ |
| 003 | ê | 048 | 0 | 093 | Ü | 138 | $\cong$ | 195 | S |
| 004 | î | 049 | 1 | 094 | $\wedge$ | 139 | 4 | 196 | G |
| 005 | ì | 050 | 2 | 095 | - | 140 | $\checkmark$ | 197 | $\dot{\mathrm{g}}$ |
| 006 | í | 051 | 3 | 096 | ' | 141 | F | 198 | K |
| 007 | ô | 052 | 4 | 097 | a | 142 | T | 199 | k |
| 008 | ó | 053 | 5 | 098 | b | 143 | $\downarrow$ | 200 | L |
| 009 | û | 054 | 6 | 099 | C | 144 | Ç | 201 | 1 |
| 010 | ú | 055 | 7 | 100 | d | 145 | $\bigcirc$ | 202 | Ž |
| 011 | $œ$ | 056 | 8 | 101 | e | 146 | ¿ | 203 | Đ |
| 012 | ú | 057 | 9 | 102 | $f$ | 147 | Ù | 204 | đ |
| 013 | ú | 058 | : | 103 | g | 148 | à | 205 | C |
| 014 | ó | 059 | ; | 104 | h | 149 | Æ | 206 | ć |
| 015 | ó | 060 | < | 105 | i | 150 | $\varnothing$ | 207 | € |
| 016 | $\Lambda$ | 061 | $=$ | 106 | j | 151 | Å | 208 | P |
| 017 | $\Psi$ | 062 | $>$ | 107 | k | 152 | Q | 209 | - |
| 018 | $\Gamma$ | 063 | ? | 108 | I | 153 | é | 210 | ě |
| 019 | . | 064 | @ | 109 | m | 154 | è | 211 | S |
| 020 | $\Omega$ | 065 | A | 110 | n | 155 | Pt | 212 | Č |
| 021 | $\Delta$ | 066 | B | 111 | 0 | 156 | i | 213 | ž |
| 022 | Ө | 067 | C | 112 | p | 157 | N | 214 | ý |
| 023 | ヨ | 068 | D | 113 | q | 158 | ò | 215 | U̇ |
| 024 | П | 069 | E | 114 | $r$ | 159 | £ | 216 | ñ |
| 025 | $\Sigma$ | 070 | F | 115 | S | 160 | $¥$ | 217 | $\checkmark$ |
| 026 | Y | 071 | G | 116 | t | 161 | $\bigcirc$ | 218 | - |
| 027 | $\Phi$ | 072 | H | 117 | u | 162 | $\Gamma$ | 219 | r |
| 028 | Ú | 073 | I | 118 | V | 163 | 」 | 224 | * |
| 029 | Ú | 074 | J | 119 | W | 164 | - | 225 | § |
| 030 | Ó | 075 | K | 120 | X | 165 | . | 226 | $\varnothing$ |
| 031 | Ó | 076 | L | 121 | y | 177 | Á | 227 | $\sim$ |
| 032 | (space) | 077 | M | 122 | Z | 178 | Í | 228 | $\uparrow$ |
| 033 | ! | 078 | N | 123 | \{ | 180 | $\overline{\mathrm{A}}$ | 229 | ] |
| 034 | " | 079 | O | 124 | I | 181 | $\overline{\mathrm{a}}$ | 230 | [ |
| 035 | \# | 080 | $P$ | 125 | \} | 182 | $\overline{\mathrm{E}}$ | 231 | " |
| 036 | \$ | 081 | Q | 126 | B | 183 | $\overline{\mathrm{e}}$ | 232 | ä |
| 037 | \% | 082 | R | 127 | ¢ | 184 | $\bar{\square}$ | 233 | Ö |
| 038 | \& | 083 | S | 128 | !! | 185 | $\overline{\mathrm{i}}$ | 234 | ü |
| 039 | , | 084 | T | 129 | 1 | 186 | $\bar{U}$ | 235 | æ |
| 040 | ( | 085 | U | 130 | 2 | 187 | $\overline{\mathrm{u}}$ | 236 | å |
| 041 | ) | 086 | V | 131 | 3 | 188 | N | 237 | É |
| 042 | * | 087 | W | 132 | 4 | 189 | n | 238 | ñ |
| 043 | + | 088 | X | 133 | 1/2 | 190 | Č | 253 | *(DC) |
| 044 | , | 089 | Y | 134 | $\mathrm{F}_{\mathrm{T}}$ | 191 | S |  |  |
| 045 | - | 090 | Z | 135 | $\leftarrow$ | 192 | C |  |  |

*(DC): Double-size character code

Department text (item label) (12 digits)


To program another dept.
*To program departments 17 through 32, press the department shift key.
Key operation example
\#/TMST $1 \odot$

FRUIT | \#/TMST |
| ---: |
| TL/NS |

Print
(Programming FRUIT for dept.1)

PLU text (item label) (12 digits)

$\qquad$

(Programming MELON to PLU1)

Function text (12 digits)

## Procedure



* Function no.: See "List of function texts" shown on the following page.

Key operation example


25 ©

TL/NS

Print

## *PGM* <br> F25 CARD1

(Programming CARD1 for credit 1)

- List of function texts

| Function no. | Key or function | Default setting |
| :---: | :---: | :---: |
| 1 | $\Theta$ | (-) |
| 2 | \%1 | \%1 |
| 3 | \%2 | \%2 |
| 4 | Differ | DIFFER |
| 5 | Taxable 1 subtotal | TAX1 ST |
| 6 | Taxable 2 subtotal | TAX2 ST |
| 7 | Taxable 3 subtotal | TAX3 ST |
| 8 | Taxable 4 subtotal | TAX4 ST |
| 9 | VAT/tax 1 | VAT 1 |
| 10 | VAT/tax 2 | VAT 2 |
| 11 | VAT/tax 3 | VAT 3 |
| 12 | VAT/tax 4 | VAT 4 |
| 13 | Net 1 | NET1 |
| 14 | Net 2 | NET2 |
| 15 | Refund | REFUND |
| 16 | Void | $\infty$ |
| 17 | Void mode total | ¢MODE |
| 18 | Manager void | MGRes |
| 19 | Subtotal void | SBTL $¢$ |
| 20 | No sale | NO SALE |
| 21 | RA | ***RA |
| 22 | PO | ***PO |
| 23 | Cash | CASH |
| 24 | Cheque | CHECK |
| 25 | Credit 1 | CREDIT1 |
| 26 | Credit 2 | CREDIT2 |
| 27 | Exchange (Preset rate) | EXCH1 |
| 28 | Exchange (Open rate) | EXCH2 |
| 29 | Exchange cheque | EX1 CHK |
| 30 | Exchange credit | EX1 CR |
| 31 | Cash in drawer | **** CID |
| 32 | Cash/cheque in drawer | CA/CH ID |


| Function no. | Key or function | Default setting |
| :---: | :---: | :---: |
| 33 | Change for cheque | CHK/CG |
| 34 | Customer | GUEST |
| 35 | Paid total | PAID TL |
| 36 | Domestic currency 1 | DOM.CUR1 |
| 37 | Domestic currency 2 | DOM.CUR2 |
| 38 | Dom. currency for EX cheque | DOM.CUR1 |
| 39 | Dom. currency for EX credit | DOM.CUR1 |
| 40 | Cheque in drawer | *CH ID |
| 41 | (+) Dept total | *DEPT TL |
| 42 | (-) Dept total | DEPT (-) |
| 43 | Net 1 (Taxable 1 - VAT/tax 1) | NET 1 |
| 44 | Net 2 (Taxable 2 - VAT/tax 2) | NET 2 |
| 45 | Net 3 (Taxable 3 - VAT/tax 3) | NET 3 |
| 46 | Net 4 (Taxable 4 - VAT/tax 4) | NET 4 |
| 47 | Subtotal | SUBTOTAL |
| 48 | Merchandise subtotal | MDSE ST |
| 49 | Total | *** TOTAL |
| 50 | Change | CHANGE |
| 51 | Sales q'ty | ITEMS |
| 52 | Average | AVE. |
| 53 | Total tax | TTL TAX |
| 54 | Net without tax | NET |
| 55 | Department report title | DEPT |
| 56 | PLU report title | PLU |
| 57 | Transaction report title | TRANS. |
| 58 | Clerk report title | CLERK |
| 59 | Hourly report title | HOURLY |
| 60 | Non add symbol (8 chara.) | \# |
| 61 | Copy receipt title | COPY |
| 62 | EJ report title | EJ |
| 63 | EJ report end title | EJ END |

- Clerk names (12 digits)


Key operation example


Print


Logo messages (6 lines and 24 digits for each line)
The register can print programmed messages on every receipt. On the standard model, a 6 -line logo message is printed on the receipt. If you want to print in other logo message format, please change the format. (See page 47 for the programming details.) The options are listed below:


* "Header 3-line message" type: 1 to 3
"Header 6-line message" type: 1 to 6
"Header 3 -line and footer 3 -line message" type: 1 to 6 ( 1 to 3 as header, 4 to 6 as footer)


## Logo message print format (3 types)



Header 3-line message


Header 6-line message


Header 3-line message and footer 3-line messages

To print the logo message "THANK YOU" using double sized characters and centering on the third line.

Key operation example


Print

## *PGM* <br> THANK YOU

Note
A 6-line logo message is preprogrammed when shipped. Please start entering from the first line when you first program a logo message.

## - Foreign currency symbol (4 digits)

Foreign currency symbol for the EX key is printed with a foreign currency exchange amount obtained using a preset rate.


| Key operation example |  |
| :---: | :---: |
| Entry using $\qquad$ character code | \#/TM/ST $6 \bigcirc$ |
|  | US SPACE |
|  | 036 (00) |
|  | \#/TM/ST TL/NS |



## Domestic currency symbol (4 digits)

"*." is set as a default setting. When you want to change the domestic currency symbol, change the setting.




## - Training mode text (12 digits)

For every receipts issued in the training mode, **TRAINING** is printed by default. When you want to change the text, follow the procedure below.


Note
The programmed text is printed in double-size characaters on the receipts issued in the training mode.

## ADVANCED FUNCTION PROGRAMMING

## 1 Register Number and Consecutive Number Programming

Register number and consecutive number are printed on every receipt or journal.
When your store has two or more registers, it is practical to set separate register numbers for identification. The consecutive number is increased by one each time a receipt or journal is issued.
For consecutive number programming, enter a number (max. 4 digits) that is one less than the desired starting number.

Register number


Setting consecutive numbers


Key operation example

$$
1000 \begin{gathered}
\text { \#/TMST } 2 @ \\
\hline \text { \#/TMST TL/NS }
\end{gathered}
$$

Print


## 2 Electronic Journal (EJ) Programming

The cash register provides the electronic journal (EJ) function. By default, a maximum of 2000 lines can be stored in memory. By decreasing the storable line numbers to 1000 lines you can expand the available number of PLU codes to 1200.

For reading journal data, refer to "EJ REPORT READING AND RESETTING" (page 60).

## EJ memory type

Caution
When this procedure is executed, EJ data is cleared, and PLU data (programming data and sales data) are reset to the default after all data is cleared even if the same memory type is selected.

*A: 0 for EJ 1000 lines and PLU 1200 codes
1 for EJ 2000 lines and PLU 200 codes

## Key operation example

\#/TM/ST $90 \otimes$
0 TL/NS

Print

| *PGM* | 0 |
| :--- | :--- |

Function parameters for EJ

## Procedure



| Item: |  | Selection: En | Entry: |
| :---: | :---: | :---: | :---: |
| A | Always enter 0. |  | 0 |
| B | Always enter 0. |  | 0 |
| C | Temporary EJ printing during transaction | Disable | 0 |
|  |  | Enable* | 1 |
| D | EJ printing and clearing EJ data when issuing general Z1 report | No* | 0 |
|  |  | Yes | 1 |
| E | PGM mode operation records type | Details* | 0 |
|  |  | Header information only | 1 |
| F | REG/MGR/VOID modes operation records type | Details* | 0 |
|  |  | Total | 1 |
| G | Compressing printing for EJ data | No (normal size) | 0 |
|  |  | Yes (small size)* | 1 |
| H | Action when EJ memory area is full | Continue | 0 |
|  |  | Continue and warning (near full warning)* | * 1 |
|  |  | Lock and warning (with near full warning) | ) 2 |

## Temporary EJ printing during transaction

- If selecting "enable", you can print journal data of a current transaction recorded in EJ memory by pressing the FCPTPO key during the transaction. To realize this function completely, the cash register must be programmed to print the receipt and set the Receipt ON/OFF function to OFF


## PGM mode operation records type

- For data of program reading operation, the header information only is printed. For $\mathrm{X} / \mathrm{Z}$ reports, the header information only is printed. (Receipt sample for Header Information only)



## Action when EJ memory area is full

- By default, when the memory for EJ becomes nearly full, the cash register shows decimal points at the 8th and 9th positions of the display (EJ memory nearly full message), and the cash register keeps storing new data while erasing the oldest data. When "0" is selected, the cash register will not show EJ memory nearly full message. When " 2 " is selected, the cash register shows EJ memory nearly full message and when the memory gets full, the cash register locks the sales/data entry with a display of the memory full message " $E-E$ ". You must issue an EJ report (Z1 report) at this time.

Key operation example
00100002 \#/TMTST 68 \# ©

Print

## *PGM*

\#68 00100002

## 3 Various Function Selection Programming 1

The cash register provides various detailed functions listed below.

- Function selection for miscellaneous keys
- Print format
- Receipt print format
- Others

For this programming, the job code entry style is applied. You can continue programming until you press the TL/NS key for the programming described in this section. To continue programming, repeat from a job code entry.

*1 Enter job code using numeric keys specified in each section below.
*2 Data entry details are listed on each table in each section below. An asterisk is entered for factory setting.
Example: When programming for job code 5 as ABCDEFGH: 00000100.

Key operation example

|  | \#/TMST 5 |
| :---: | :---: |
| 00000100 |  |

Print

## *PGM* <br> \#5 00000100

## Function selection for miscellaneous keys

Job code: 5

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Paid-out in the REG-mode | Enable* | 0 |
|  |  | Disable | 1 |
| B | Received on account in the REG-mode | Enable* | 0 |
|  |  | Disable | 1 |
| C | Subtotal void in the REG-mode | Enable* | 0 |
|  |  | Disable | 1 |
| D | Indirect void in the REG-mode | Enable* | 0 |
|  |  | Disable | 1 |
| E | Direct void in the REG-mode | Enable* | 0 |
|  |  | Disable | 1 |
| F | Refund entry in the REG-mode | Enable* | 0 |
|  |  | Disable | 1 |
| G | No sale in the REG-mode | Enable* | 0 |
|  |  | Disable | 1 |
| H | Fractional quantity entry | Enable | 0 |
|  |  | Disable* | 1 |

## Print format

Job code: 6

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Printing style | Journal printing | 0 |
|  |  | Receipt printing* | 1 |
| B | Receipt print form | Total | 0 |
|  |  | Detailed* | 1 |
| C | Time print on receipts/journals | Yes* | 0 |
|  |  | No | 1 |
| D | Date print on receipts/journals | Yes* | 0 |
|  |  | No | 1 |
| E | Consecutive no. print | Yes* | 0 |
|  |  | No | 1 |
| F | Separator line in reports | One line space | 0 |
|  |  | Separator line* | 1 |
| G | Zero skip in PLU report | No | 0 |
|  |  | Yes* | 1 |
| H | Zero skip in full sales/clerk/hourly | No | 0 |
|  | report | Yes* | 1 |

## Printing style

- Even when receipt printing is selected, the journal rewind motor will be driven in PGM, OP X/Z, X1/Z1 and X2/Z2 modes so you can wind sales and programming reports.

Receipt print format
Job code: 7

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Always enter 0. |  | 0 |
| B | Always enter 0. |  | 0 |
| C | Subtotal print with a press of subtotal key | No* | 0 |
|  |  | Yes | 1 |
| D | Always enter 0. |  | 0 |
| E | VAT/tax amount print | Yes* | 0 |
|  |  | No | 1 |
| F | Taxable amount print | Yes* | 0 |
|  |  | No | 1 |
| G | Net amount print | Yes* | 0 |
|  |  | No | 1 |
| H | Purchase no. print | Yes* | 0 |
|  |  | No | 1 |

## - Other programming

Job code: 61

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Always enter 0. |  | 0 |
| B | Always enter 0. |  | 0 |
| C | Minus dept. and PLU/subdept. | Disable | 0 |
|  |  | Enable* | 1 |
| D | Fractional treatment | Round off (4 down, 5 up)* | 0 |
|  |  | Raising to unit | 1 |
|  |  | Disregarding fractional treatment | 2 |
| E | Use of (00) key | As 00 key* | 0 |
|  |  | As 000 key | 1 |
| F | Time format | 12-hour format | 0 |
|  |  | 24-hour format* | 1 |
| G | Date format | Use month-day-year format | 0 |
|  |  | Use day-month-year format* | 1 |
|  |  | Use year-month-day format | 2 |
| H | Position of decimal point (from right) (TAB) |  | 0 to 3 (default: 2) |

Job code: 62

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Always enter 0. |  | 0 |
| B | Error beep for misoperation | Lock error | 0 |
|  |  | Misoperation* | 1 |
| C | Key catch sound | Yes* | 0 |
|  |  | No | 1 |
| D | Buffered keyboard | Yes* | 0 |
|  |  | No | 1 |
| E | Void mode | Enable* | 0 |
|  |  | Disable | 1 |
| F | Printing of void mode in Z 2 report | Yes* | 0 |
|  |  | No | 1 |
| G | Printing of void mode in Z 1 report | Yes* | 0 |
|  |  | No | 1 |
| H | Addition to the hourly total in VOID mode | No* | 0 |
|  |  | Yes | 1 |

## Job code: 63

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Receipting at the time of "no sale" entry | Yes* | 0 |
|  |  | No | 1 |
| B | No sale after non-add code entry | Disable | 0 |
|  |  | Enable* | 1 |
| C | Non-add code entry | Enable* | 0 |
|  |  | Disable | 1 |
| D | Copy receipt | No* | 0 |
|  |  | Yes | 1 |
| E | Entry that causes the merchandise | Enable* | 0 |
|  | subtotal to be smaller than zero | Disable | 1 |
| F | Subtotal entry before tendering | Noncompulsory* | 0 |
|  |  | Compulsory | 1 |
| G | Subtotal entry before direct non-tender | Noncompulsory* | 0 |
|  | finalization | Compulsory | 1 |
| H | Direct non-tender finalization after | Disable | 0 |
|  | tendering | Enable* | 1 |

Job code: 64

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Printing of GT1 on Z report | Yes* | 0 |
|  |  | No | 1 |
| B | Printing of GT2 on Z report | Yes* | 0 |
|  |  | No | 1 |
| C | Printing of GT3 on Z report | Yes* | 0 |
|  |  | No | 1 |
| D | Printing of Training GT on Z report | Yes* | 0 |
|  |  | No | 1 |
| E | Printing of $Z$ counter on $Z$ report | Yes* | 0 |
|  |  | No | 1 |
| F | Printing of DATA on PLU resetting report | Yes* | 0 |
|  |  | No | 1 |
| G | Resetting of GT1, 2, 3 at the general Z1 | No* | 0 |
|  | report | Yes | 1 |
| H | OP X/Z report | Enable* | 0 |
|  |  | Disable | 1 |

Job code: 66


## Compression print on journal at REG, MGR and VOID modes

-This selection is valid only when "Printing style" (job code 6) is set as "journal printing".

Job code: 67


Rounding up of the unit digit of amount (C)
Rounding down of the unit digit of amount (D)

- Handle C and D as a pair. When you live in Australia, Switzerland, Netherlands or Norway, set as shown on the table below for the parameters $C$ and $D$.
The rounding is performed as follows:
In case $C=0$ : Unit digit of amount < or = Value of $D-$ rounding down
Value of $\mathrm{D}<$ or = Unit digit of amount - rounding to 5
In other cases: Unit digit of amount < or = Value of $D$ - rounding down
Value of D < Unit digit of amount < Value of C - rounding to 5
Value of $\mathrm{C}<$ or = Unit digit of amount - rounding up


## Application of rounding (E)

Limit of the least significant digit in entering amount of item (F)
Difference of memory before rounding and after rounding (G)
Limit of the least significant digit in entering amount of payment (H)

- When you live in Australia, Switzerland, Netherlands or Norway, set as shown on the table below for the parameters E through H .

|  | CD | E | F | G | H |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Australia | 82 | Payment $^{*}$ | Arbitrary | Yes | 0 and 5 only |
| Switzerland | 82 | Item \& payment | 0 and 5 only | No | 0 and 5 only |
| Netherlands | 82 | Payment | Arbitrary | Yes | 0 and 5 only |
| Norway | 54 | Payment | Arbitrary | Yes | 0 only |

* Applied to payment by cash only. For payment by cheque or credit, set it in "B".

Job code: 69


## Rounding system

- When you live in Sweden or Denmark, change the default setting $(\mathrm{H}=0)$ to the corresponding setting.


## 4 Various Function Selection Programming 2

The cash register provides various options so you can use the register to suit your sales needs.
In this section, you can program the following features (parameters within parentheses indicates default setting):

- Power save mode (entering the power save mode affter 30 minutes)
- Logo message print format (Header 6-line message)
- Thermal printer density (standard density)
- Language selection (English)
- Training clerk specification (none) - If you specify a clerk code who is trained for use on this cash register, the cash register will go into training mode when the clerk code is registered for sales entries. The sales operations done by the trained clerk do not affect sales totals. For details, refer to TRAINING MODE section.


## Power save mode

## Procedure



| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Entering power save mode | Yes* | 0 |
|  | when time is displayed | No | 1 |
| B-D | Time(min.) to entering power save mode since no operation is made |  | 001-254 or 999 (Default 030) |

Note
When 999 is set for $B$ to $D$, entering into power save mode is inhibited.

Key operation example

0060 | \#/TM/ST 10 \#/TM/ST $\mathrm{TL} / \mathrm{NS}$ |
| :--- |

Print

## *PGM*

\#10
0060

## Logo message print format

You can select the number of lines for your logo message, and the position to print it on receipt. For details of the logo message type, please refer to "Logo messages" on page 37.

## Procedure


*A: Logo message type
0 : Header 3-line message
3: Header 6-line message (default)
5: Header 3-line message and footer 3 -line message

Key operation example

$$
\begin{aligned}
& \text { \#/TMSTT } 11 @(8) \\
& 0 \text { \#/TMSTT TL/NS }
\end{aligned}
$$

Print


## - Thermal printer density

## Procedure



* By default, 50 is set. To make the print darker, set a larger number, and to make the print lighter, set a smaller number.

Key operation example

| \#/TM/ST $50 \otimes$ |
| :--- |
| 70 \#/TM/ST $\mathrm{TL} / \mathrm{NS}$ |

Print

| Print |  |
| :--- | :--- |
| *PGM* <br> \#50 | 70 |

- Language selection

$\qquad$

| $\frac{\text { \#TMST } 88 @(\mathbb{T L / N S}}{18}$ |
| :---: |
|  |  |

Print


## Caution

 When you change the language, the text such as clerk name, logo message and function text, which you programmed, will be reset to the default settings.
## Training clerk specification for training mode

For the details of clerk training, please refer to "TRAINING MODE" on page 56.

## Procedure



Key operation example
\#/\#TMST 86 ( $\otimes$ )
15 \#/TMSST TL/NS

Print
\#86 15

## AUTO key programming - Automatic sequencing key

If you program frequently performed transactions or report sequences for the AuT0 key, you can call those transactions and/or reports simply by pressing the auro key in key operations.

## Procedure



Programming for AUTO); entering a PLU 2 item and a dept. 6 item (unit price: 1.00)


Note
When the AUTO key has been programmed to execute a report job function etc., the mode switch must be in the appropriate position (REG, MGR, OPX/Z, X1/Z1 or X2/Z2).

## 5 EURO Programming

For details of EURO migration operation, please refer to "EURO MIGRATION FUNCTION".
■ EURO system settings


Printing exchange total amount and change amount on receipt or journal

- Total and change amounts in exchange currency are printed respectively below each of the total and exchange amounts in domestic currency.


## Exchange calculation method

- "Division" or "Multiplication" can be selected for the conversion method from domestic currency to exchange currency, and the calculation is performed as follows:
In case that "Division" is selected:
Domestic currency amount $\div$ Exchange rate $=$ Exchange amount
In case that "Multiplication" is selected
Domestic currency amount $\times$ Exchange rate $=$ Exchange amount

Key operation example
\#/TMST 8 © 8
1000 \#\#TMST
TL/NS

Print


- Automatic EURO modification operation settings


Key operation example

| Print |  |
| :--- | :--- |
| *PGM* <br> $\# 12$ | 01 |

Note If you have already made the Job \#800 operation with the substitution of 3 for "A" in the X2/Z2 mode, this programming is disabled.

## Date setting for EURO modification operation

## Procedure



Key operation example

$$
\begin{array}{r}
\text { \#/TM/ST } 13 \text { ® } \\
01072002 \begin{array}{l}
\text { \#/TM/ST } \\
\mathrm{TL} / \mathrm{NS}
\end{array}
\end{array}
$$

Print


Note -In case you changed the date format using job code 61, follow the format you selected for setting the date.

- If all zeros are set, this programming is disabled.
- If you have already made the Job \#800 operation with the substitution of 3 for " $A$ " in the X2/Z2 mode, this programming is disabled.


## Time setting for EURO modification operation

## Procedure



Key operation example

| \#/TM/ST | 14 ( $\otimes$ |
| ---: | ---: |
| 10 | \#/TM/ST |
|  | TL/NS |

Print


Note

- If you have already made the Job \#800 operation with the substitution of 3 for "A" in the X2/Z2 mode, this programming is disabled.


## 6 Reading Stored Programs

The machine allows you to read every program stored in the PGM mode.
■ Key sequence for reading stored program

| Report name | Key sequence |
| :--- | :--- |
| Programming report 1 | $T L / N S$ |
| Programming report 2 | 2 |
| Auto key programming report | $\longrightarrow \mathrm{TL} / \mathrm{NS}$ |
| Printer density programming report | $3 \longrightarrow \mathrm{TL} / \mathrm{NS}$ |
| PLU programming report | Start PLU code $\longrightarrow \mathrm{TL} / \mathrm{NS}$ |

Note To stop reading PLU programming report, turn the mode switch to the MGR position.

## Sample printouts

## 1 Programming report 1



## 2 Programming report 2



3 Auto key programming report


## EURO MIGRATION FUNCTION

Your register can be modified to correspond with each period set for the introduction of EURO, and in your register each currency is treated as shown on the table below depending on which period you are in.
Basically your register can be automatically modified to correspond to the introduction of EURO by executing automatic EURO modification operation shown below in the X2/Z2 mode. However, there are several options you must set depending on your needs. So, please carefully conduct necessary settings.

How currencies are treated in your register

|  | Period 1 | Period 2 | Period 3 |
| :---: | :---: | :---: | :---: |
|  | After the introduction of EURO, and before EURO banknotes and coins begin to circulate | After EURO banknotes and coins begin to circulate, and before national currency is withdrawn from circulation. (Co-existence of EURO and national currency) | After the national currency is withdrawn from circulation |
| EURO | Exchange key (Preset rate entry) | Domestic currency | Domestic currency |
| $\begin{aligned} & \text { National currency } \\ & \bar{\omega} \\ & \\ & \hline \end{aligned}$ | Domestic currency | Exchange key (Preset rate entry) |  |
| < Foreign currency | Exchange key (Manual rate entry) | Exchange key (Manual rate entry) | Exchange key |

## Automatic EURO modification operation

Make sure the mode switch is in the X2/Z2 mode first, then perform the following procedure. Please not that you can perform each operation only once with the substitution of " $\mathrm{A}=1$ ", " $\mathrm{A}=2$ " and " $\mathrm{A}=3$ ". For example if you performed the operation with the substitution of " $A=2$ " first, you cannot perform the operation with the substitution of " $\mathrm{A}=1$ ".

*A=1: Applicable for period 1
*A=2: Applicable for period 2
*A=3: Applicable for period 3

The details of the register system modification are as shown below:

| Items | A=1 <br> (EURO status 1) | A=2 <br> (EURO status 2) | A=3 <br> (EURO status 3) |
| :--- | :--- | :--- | :--- |
| General Z1 report | Issue | Issue | Issue |
| General Z2 report | Issue | Issue | Issue |
| GT memories (GT1, GT2, GT3 and Training GT) | - | Clear | Clear*1 |
| Conversion of preset prices of Dept./PLU | - | Yes | Yes*1 |
| Conversion of entry digit/amount limit | - | Yes | Yes*1 |
| Exchange amount printing for total and change | Yes | Yes | No |
| Exchange calculation method | Division | Multiplication | Multiplication |
| Domestic currency symbol | - | [EURO] | [EURO] |
| Domestic currency decimal point position | - | 2 | 2 |
| Exchange currency symbol | $[$ EURO] | Previous domestic currency <br> symbol | -*2 |
| Exchange currency decimal point position | 2 | Previous domestic currency <br> decimal point position | - |
| Rounding system (Denmark/Sweden/Normal) | - | Normal | Normal*1 |
| Rounding up/down of the unit digits of amount | - | No | No*1 |
| Lowest digit entering limitation of item | - | Arbitrary | Arbitrary*1 |
| Lowest digit entering limitation of payment | - | Arbitrary | Arbitrary*1 |
| Difference of memory before rounding and after | - | No | No*1 |
| rounding |  | Round off | Round off |
| Rounding of exchange currency | Round off <br> $(4$ down/5 up) |  |  |

- The item marked with "-" remains the same as the previous data.
*1: When you perform from EURO status 2, previous data remains unchanged.
*2: When you perform from EURO status 1 or 2, "space" is set.


## IMPORTANT

- Conversion of the preset unit prices of departments and PLUs Note that the conversion rate of the preset rate of the EX key is applied for the conversion, and the method is set to "division". When the conversion is performed, the message "PRICE CONVERTED" will be printed on the \#800 report.
- After the execution of the procedure with " $\mathrm{A}=1$ ", treat EURO as foreign currency using the exchange key (EX) with the preset rate entry. Set the EURO conversion rate as the currency exchange rate for the exchange key.
- After the execution of the procedure with " $A=2$ ", treat EURO as domestic currency, and national currency as foreign currency using the exchange key (EX) with the preset rate entry. Set the EURO conversion rate as the currency exchange rate for the exchange key.
- As for the percent rate for $\% 1, \% 2$ and $\Theta$, the automatic conversion is not made. So, when your domestic currency becomes EURO, you must change these settings so that they are base on EURO currency.

[^2]
## Checking the current EURO status

You can check the EURO status currently set on the cash register. Set the manager key (MA) to the X2/Z2 position, and perform the following sequence. The current EURO status will be printed on the receipt/journal.



## ■ Optional Programming for the Introduction of EURO

Some programming relating with the function of exchange key (EX) cannot be changed automatically with the execution of modification operation described in the previous section. After the execution on each period, conduct the following programming depending on your needs.

## Programming for Exchange Key (EX)

## Currency exchange rate

For period 1 and period 2, set the EURO conversion rate.
For programming details, refer to "Rate for \%1, (\%2 and EX" on page 29.

## Exchange rate entry selection

When you treat EURO currency in the exchange key, you must apply preset rate entry. So, make enable for preset rate entry for period 1 and period 2. For programming details, refer to "Function parameters for EX" on page 31.

## Cheque/credit operation

For period 1 and period 2 , enable cheque/credit operation when tendering in foreign currency so that you can treat cheque and credit for EURO currency and national currency. For programming details, refer to "EURO system settings" on page 49.

Setting the date and time when the automatic modification operation for EURO should be executed Selection of compulsory/non-compulsory of execution of the automatic modification operation for EURO You can program the scheduled date and time to execute the automatic EURO modification operation . From ten days before the preset date, the remaining days are printed at the bottom of the daily full resetting (Z1) report as follows.


When the above-mentioned preset date and time has come, and also when you start an entry in the REG/MGR mode, the error message " $E-E U$ " is displayed. You cannot make any operation in the REG/MGR mode until you execute the automatic modification operation for EURO (job \#800) in the X2/Z2 mode.
You can program so that you can make entries in the REG/MGR mode even when the error message is displayed.
Date and time setting will be reset after the execution of the automatic modification operation and you can program again the date and time for the next automatic modification operation.

## TRAINING MODE

The training mode is used when the operator or the manager practices register operations.
When a clerk in training is selected, the machine automatically enters the training mode. To specify a clerk to be trained, refer to "Training clerk specification for training mode" in "ADVANCED FUNCTION PROGRAMMING" in page 48.
The training operation is valid only in REG, MGR and $\infty$ mode.
The corresponding clerk memory is only updated in the training mode.


## READING (X) AND RESETTING (Z) OF SALES TOTALS

- Use the reading function $(\mathrm{X})$ when you need to take a reading of sales information entered since the last reset. You can take this reading any number of times. It does not affect the register's memory.
- Use the resetting function $(Z)$ when you need to clear the register's memory. Resetting prints all sales information and clears the entire memory except for the GT1 through GT3, Training GT, reset count, and consecutive number.


## 1 Summary of Reading (X) and Resetting (Z) Reports

X 1 and Z 1 reports: Daily sales reports
X 2 and Z 2 reports: Periodic (monthly) consolidation reports
When you take an X or Z report, turn the mode switch to the appropriate position referring to the column of "Mode switch position" shown on the table below, and use the following corresponding key sequence.

| Item | Mode switch position |  |  | Key operation |
| :---: | :---: | :---: | :---: | :---: |
|  | OPX/Z | X1/Z1 | X2/Z2 |  |
| Flash report: (Only display) <br> To clear the display, press the (CL) key or turn the mode switch to another position. | X | - | - |  |
|  |  |  |  | (®) key: Amount of cash in drawer |
|  |  |  |  | TL/NS key: Sales total |
| Full sales report | - | X1, Z1 | X2, Z2 | Reading: TL/NS Resetting: $\bullet \rightarrow$ TL/NS |
| Individual clerk report | X, Z | - | - | Reading: $\square$ CLK\# Resetting: CLK\# (The report of the current clerk) |
| Full clerk report | - | $\mathrm{X} 1, \mathrm{Z} 1$ | - | Reading: $\qquad$ CLK\# <br> Resetting: <br> CLK\# |
| PLU sales report | - | X1, Z1 | - |  |
| Hourly report | - | X1, Z1 | - | Reading: \#/TM/ST Resetting: $\bullet \rightarrow$ \#/TM/ST |

## Note

- When both sales quantities and sales amounts are zero, printing is skipped. If you do not want to skip, change the programming. (Refer to "Print format" of "Various Function Selection Programming 1".)
- "X" represents read symbol and "Z" represents reset symbol in the reports.
- To stop reading and resetting the PLU sales report, turn the mode switch to the MGR position. The data will not be erased when you reset.


## 2 Daily Sales Totals

## Full sales report

## - Sample report



| $\begin{aligned} & \text { DEPT. } 35 \\ & \text { D5O } \\ & \text { DEPT. } 50 \\ & \text { *DEPT TL } \end{aligned}$ | $\begin{array}{r} 60^{-1.00} \\ 1520^{* 90.00} \\ * 1334.44 \end{array}$ | \} " + " dept. counter |
| :---: | :---: | :---: |
| DO3 <br> DEPT. 03 <br> DEPT (-) | $\begin{array}{ll} 50 \\ 5 & -25.79 \\ -25.79 \end{array}$ | \}"" dept. counter |
| $\underset{(-)}{* T R A N S . *} 1_{-1.00}$ |  | $\}$ Subtotal $\Theta$ counter |
| \%1 | 10 | \} Subtotal percent 1 |
| \%2 | 10 |  |
| NET 1 | $\begin{array}{r} * 2.20 \\ * 1308.72 \end{array}$ | - Net sales total |
| TAXI ST | *175.03 | - Taxable 1 total |
| VAT 1 | *26. 07 | - VAT 1 total |
| TAX2 ST | *175.03 |  |
| VAT 2 | *15.91 |  |
| TAX3 ST | *175.03 |  |
| VAT 3 | *8.33 |  |
| TAX4 ST | *175.03 |  |
| VAT 4 | *12.21 |  |
| ITL TAX | *62. 52 | - Tax total |
| NET | *1246. 20 | - Net total without tax |

*1: When you take X 1 report, " X 1 " is printed.
*2: Printed in the Z1 report only.
*3: When "difference of memory" is set to "yes" the following is displayed here.


| (-) | 10.0 | \} Item $\Theta$ counter and total |
| :---: | :---: | :---: |
| \%1 | $10_{-0.60}$ | \|Item percent 1 counter and total |
| \%2 | 10 |  |
| REFUND | $6 Q^{* 2.75}$ | \}Refund counter and total |
| 0 | $13 Q_{* 57.56}$ | \}REG-mode void counter <br> $\}$ and total |
| @ MODE | $10 \quad * 3.25$ | \}Void-mode transaction <br> counter and total |
| MGR in | $10 * 3.25$ | $\}$ Manager item void counter |
| SBTL $n$ | $10$ | \} Subtotal void counter |
| NO SALE | 20 | ${ }_{5}$ No-sales counter |
| ***RA | $20$ | Received on account counter and total <br> \}Paid out counter and total |
| ***PO | $\begin{array}{r} 30 \\ \\ \\ \\ \end{array}$ |  |
| GUEST | 520 | - Customer counter |
| PAID TL | *1308 | - Paid total |
| AVE. | *25.17 | - Paid total average per customer |
| CASH | 410 *815. 42 | \}Cash counter and total |
| CHECK | $30$ | $\}$ Cheque sales counter |
| CREDIT1 | $20$ | \}Credit1 sale and tendering counter and total |
| CREDIT2 | $20$ |  |
| EXCH1 | $20$ <br> $€ 300.00$ | \}exchange counter and $\int_{\text {total (in preset rate entry) }}$ |
| DOM. CUR1 | *153.38 | - Domestic currency |
| EXCH2 | $\begin{aligned} & 10 \\ & 100.00 \end{aligned}$ | $\begin{aligned} & \text { Exchange manual rate entry } \\ & \text { counter and total } \end{aligned}$ |
| DOM. CUR2 | *78. 42 |  |
| EXI CHK | $20$ <br> € 100.00 | $\}$ Exchange check (in preset |
| DOM. CUR1 | *51. 11 |  |
| EX1 CR | 10 $€ 107.57$ | $\}$ Exchange credit (in preset |
| DOM. CUR1 | *55.00 |  |
| ****CID | *812.16 | -Cash in drawer |
| *CH ID | *33. 15 | - Cheque in drawer |
| CA/CH ID | *845. 31 | Cash + cheque in drawer |
| CHK/CG | *6.96 | Change total for cheque tendering |

*4: When manual tax 1-4 system or auto tax 1-4 system is selected, the following is displayed here.


## ■ Clerk reports

Individual clerk report

- Sample report

*: When you take OPZ report, "OPZ" is printed.


## Full clerk report

The printout occurs in the same format as in the sample report of individual clerk, but all clerk's sales data are printed in the order of clerk code number (from \#1 to \#15).

## PLU sales report

- Sample report

*: When you take Z1 report, "Z1" is printed.
Hourly report
- Sample report


*: When you take Z1 report, "Z1" is printed.


## 3 Periodic Consolidation

## Full sales report

- Sample report


The subsequent printouts are the same in format as in the $\mathrm{X} 1 / \mathrm{Z} 1$ full sales report.
*1: When you take X2 report, "X2" is printed.
*2: Printed in the Z2 report only

## EJ REPORT READING AND RESETTING

The cash register provides electronic journal (EJ) function. This function is intended to record the journal data in a memory instead of journal paper, and print the data as an EJ report. The register records the journal data in REG, PGM, $\infty$, $\mathrm{X} 1 / Z 2$ and $\mathrm{Z} 2 / \mathrm{Z2}$ modes. By default, a maximum of 2000 lines are stored in the memory. For details of EJ programming, please refer to "Electronic Journal (EJ) Programming" section (page 40).

## Printing journal data on the way of a transaction

You can print journal data of a current transaction recorded in EJ memory by pressing the हCवTrPO key during the transaction.

Note
This function is valid when the printing style is set to receipt type on the programming, and also the receipt ON/OFF function is set to OFF.

- Sample print



## Reading and resetting the electronic journal data (Issuing EJ report)

You can read the journal data stored in the EJ memory in the journal format by executing the following procedure in the $\mathrm{X} 1 / \mathrm{Z} 1$ or OP X/Z mode.

To read all of the data:


To reset all of the data:


To read the last 10 records:


## Note

- To stop reading or resetting the data, turn the mode switch to "MGR" position. The data will not be erased when resetting.
- On the EJ memory, a maximum of 2000 (or 1000, depending on programming) lines of data can be stored. When executing all data reading, all of the data stored in the EJ memory will be printed.
- Sample EJ report



## OVERRIDE ENTRIES

Programmed limit for functions (such as for maximum amounts) can be overridden by making an entry in the MGR mode.

## Procedure

1. Turn the mode switch to the MGR position.
2. Make an override entry.

## Example

In this example, the register has been programmed not to allow
 discounts entries over 1.00.

Key operation example

$250 \Theta$
Return the mode switch
to the REG position.
TL/NS

## CORRECTION AFTER FINALIZING A TRANSACTION (Void mode)

When you need to void incorrect entries that clerks cannot correct (incorrect entries found after finalizing a transaction or cannot be corrected by direct or indirect void), follow this procedure:

1. Turn the mode switch to the position using the manager key (MA), to enter into the void mode.
2. Repeat the entries that are recorded on an incorrect receipt. (All data on the incorrect receipt is removed from register memory; the voided amounts are added to the void-mode transaction totalizer.)


| Incorrect receipt |  |  |
| :--- | :--- | :--- |
| DEPT. 04 |  |  |
| DEPT. 03 |  | $* 10.00$ |
|  |  | $* 1.50$ |
| IIEMS | 20 |  |
| CASH | $* 1$ |  |

Cancellation receipt

| DEPT. 04 <br> DEPT. 03 | * |
| :---: | :---: |
|  | *10.00 |
|  | *1.50 |
| $\xrightarrow{\text { ITEMS }}$ CASH ${ }^{20}$ |  |
|  | . 50 |

## OPERATOR MAINTENANCE

## 1 In case of Power Failure

When power is lost, the machine retains its memory contents and all information on sales entries.

- When power failure is encountered in register idle state or during an entry, the machine returns to normal operation after power recovery.
- When power failure is encountered during a printing cycle, the register prints "=============" and then carries out the correct printing procedure after power recovery. (See the sample print.)

F06 TAX2 ST
F07 TAX3 ST
= = = = = = = = = =
F08 TAX4 ST
F09 VAT 1

## 2 In Case of Printer Error

If the printer runs out of paper, the printer will stall, and "PPPPPPPPPP" will appear on the display. Key entries will not be accepted. Refer to section 5 in this chapter, install a new roll, then press the (CL) key. The printer will print the power failure symbol and resume printing.

If the print head comes up, the printer stalls, "H" will appear on the extreme left of the display. Key entries will not be accepted. Bring the print head back to the correct position, then press the (CL) key. The printer will print the power failure symbol and resume printing.

## 3 Cautions in Handling the Printer and Recording Paper

## $\square$ Cautions in handling the printer



- Avoid dusty and humid environments, direct sunlight and iron powder (a permanent magnet and electromagnet are used in this machine.)
- Use the print head release lever only when necessary.
- Never pull the paper when it is in contact with the print head. First release the head with the print head release lever, and then remove the paper.
- Never touch the surface of the print head.
- Never touch around the print head and the motor during printing or before they have had sufficient time to cool.


## ■ Cautions in handling the recording paper (thermal paper)

- Use only paper specified by SHARP.
- Do not unpack the thermal paper until you are ready to use it.
- Avoid heat. The paper will color at around $70^{\circ} \mathrm{C}$.
- Avoid dusty and humid storage places. Avoid direct sunlight.
- The printed text on the paper can discolor under conditions of high humidity and temperature, exposure to the direct sunlight, contact with glue, thinner or a freshly copied blueprint, and heat caused by friction from scratching or other means.
- Be very careful when handling the thermal paper. If you want to keep a permanent record, copy the printed text with a photocopier.


## 4 Replacing the Batteries

This cash register displays a low battery symbol ( $L$ ) when the batteries are low, and displays a no battery symbol ( $L$ ) when batteries are extremely low or batteries are not installed.

When the low battery symbol is displayed, replace the batteries with new ones as soon as possible. The existing batteries will be dead in about two days.
When the no battery symbol is displayed, replace the batteries immediately. Otherwise, if the AC power cord is disconnected or a power failure occurs, all the programmed settings will be reset to the default settings and any data stored in memory will be cleared.

Note Be sure to observe precautions shown on page 1 when handling batteries.

## To replace the batteries:



1. Make sure that the cash register is plugged in.
2. Turn the mode switch to the REG position with the power cord connected.
3. Remove the printer cover.
4. Open the battery compartment cover and remove the old batteries.
5. Install three new R6 or LR6 batteries ("AA" size) in the battery compartment. Be sure the positive and negative poles of each battery are facing in the proper direction. When they are installed correctly, the " $L$ " or " $L$ " symbol will disappear.
6. Close the battery compartment cover.
7. Replace the printer cover.

## 5 Replacing the Paper Roll

Be sure to use paper rolls specified by SHARP.
The use of any other paper rolls other than those specified could cause paper jamming, resulting in register malfunction.

## Paper specification

Paper width: $57.5 \pm 0.5 \mathrm{~mm} \quad$ Max. outside diameter: $80 \mathrm{~mm} \quad$ Quality: Thermal paper

- Be sure to set paper roll(s) prior to using your machine, otherwise it may cause a malfunction.

Install the paper roll in the printer. Be careful to set the roll and cut the paper end correctly. If the top end of the paper roll is fixed with paste or tape, the paper may lose its color development ability in the pasted or taped area due to the deterioration of the heat-sensitive color development component of the paper surface. This may result in nothing appearing at this location when printing. Therefore, when setting a new paper roll in the machine, be sure to cut off approximately one revolution (approx. 25 cm long).
(How to set the paper roll)


Correct


Incorrect
(How to cut the paper end)


Correct


Incorrect

## Removing the paper roll

When a red dye appears on the paper roll, it is time to replace it. Replace the paper roll with new one. If you plan on not using the register for an extended period of time, remove the paper roll, and store it in an appropriate place.
Caution: The paper cutter is mounted on the cover. Be careful not to cut yourself.

When the take-up spool is not used:


1. Turn the mode switch to the REG position with the power cord connected.
2. Remove the printer cover.
3. Cut the paper behind the printer and near the paper roll.
4. Press the $\uparrow$ key until the paper remaining in the printer comes out completely.
5. Remove the paper roll from the paper roll cradle.

Note Do not pull the paper through the printer.

## When the take-up spool is used:



1. Turn the mode switch to the REG position with the power cord connected.
2. Remove the printer cover.
3. Press the $\uparrow$ key to advance the journal paper until its printed part is out of the way.
4. Cut the paper and remove the take-up spool.
5. Cut the paper behind the printer and near the paper roll.
6. Press the $\uparrow$ key until the paper remaining in the printer comes out completely.
7. Remove the paper roll from the paper roll cradle.

Note Do not pull the paper through the printer.

8. Remove the outer side of the take-up spool as shown on the left.
9. Remove the printed journal roll from the take-up spool.

## - Installing the paper roll

Caution: The paper cutter is mounted on the cover. Be careful not to cut yourself.


1. Turn the mode switch to the REG position with the power cord connected.
2. Remove the printer cover.
3. Check that the print head release lever is in the printing position.
4. Set the paper correctly in the paper roll cradle.
5. Insert the end of the paper into the printer until it is caught by the printer auto-feed and comes out of the top of the printer. If the printer does not catch the paper, feed the paper while pressing the $\uparrow$ key.
6. When not using the take-up spool (using as receipt paper) :

- Cut off the excess paper using the edge of the inner cover, and replace the printer cover. Press the $\uparrow$ key to make sure that the paper end comes out of the printer cover.


## Note

 If the paper end does not come out, open the printer cover, and pass the paper end between the paper cutter and the paper guide of the printer, and replace the cover.When using the take-up spool (using as journal paper) :

- Insert the end of the paper into the slit in the spool. (Press the $\uparrow$ key to feed more paper if required.)
- Wind the paper two or three turns around the spool shaft.
- Set the spool on the bearing, and press the $\uparrow$ key to take up excess slack in the paper.
- Replace the printer cover.


## Note

You can wind the roll paper in OP $X / Z, X 1 / X 2$, and $X 2 / Z 2$ modes even if you programmed so that the printer is used for issuance of receipts. This may be convenient to wind reports. In this case, set the roll paper to the take-up spool.

When you want to manually install a new roll of paper while the machine is turned off, follow the steps shown below:

1. Pull the print head release lever toward you (to the head-up position). (Refer to the diagram on page 62.)
2. Correctly place the new paper roll into the paper roll cradle.
3. Insert the paper end into the printer until it comes out of the printer.
4. Return the print head release lever to its original position.

## 6 Removing a Paper Jam

Caution: The paper cutter is mounted on the cover. Be careful not to cut yourself. Never touch the print head immediately after printing, because the head may still be hot.

1. Remove the printer cover.
2. Pull the print head release lever toward you (to the head-up position). (Refer to the diagram on page 62.)
3. Remove the paper jam. Check for and remove any shreds of paper that may remain in the printer.
4. Return the print head release lever to its original position.
5. Reset the paper roll correctly by following the steps in "Installing the paper roll".

## 7 Cleaning the Print Head

When the printed text is getting dark or faint, paper dust may be stuck to the print head. Clean the print head as follows:


## Caution:

- Never touch the print head with a tool or anything hard as it may damage the head.
- The paper cutter is mounted on the cover. Be careful not to cut yourself.

1. Turn the mode switch to the " $J$ " position.
2. Remove the printer cover.
3. Remove the inner cover that protects the printer. (Press the lever located both sides and lift the cover up.)
4. Pull the print head release lever toward you (to the head-up position). (Refer to the diagram on page 62.)
5. Clean the print head with a cotton swab or soft rag moistened with ethyl alcohol or isopropyl alcohol.
6. Return the print head release lever to its original position immediately after cleaning.
7. Replace the inner cover. (Insert the side tabs of the cover into their slots and press the cover in the printer until it is properly seated.)
8. Reset the paper roll correctly by following the steps in "Installing the paper roll".

## 8 Removing the Till and the Drawer

The till in the register is detachable. After closing your business for the day, remove the till from the drawer and keep the drawer open. The 5 -denomination coin case is also detachable from the till. To detach the drawer, pull it forward fully with the till removed, and remove it by lifting it up.


## 9 Opening the Drawer by Hand



The drawer automatically opens. However, when a power failure occurs or the machine becomes out of order, slide the lever located on the bottom of the machine in the direction of the arrow. (See the diagram at the left.)
The drawer will not open if it is locked with the key.

## Before Calling for Service

The malfunctions shown in the left-hand column below, labelled "Fault," do not necessarily indicate functional faults of the machine. It is therefore advisable to refer to "Checking" shown in the right-hand column before calling for service.

| Fault | Checking |
| :---: | :---: |
| (1) The display shows symbols that do not make sense. | - Has the machine been initialized properly as shown in "GETTING STARTED"? <br> (Note that initialization clears all the data and programmed settings stored in memory.) |
| (2) The display won't illuminate even when the mode switch is turned to any other position than " $\downarrow$ ". | - Is power supplied to the electrical outlet? <br> - Is the power cord plug out or loosely connected to the AC outlet? |
| (3) The display is illuminated, but the whole machine refuses registrations. | - Is a clerk code assigned to the register? <br> - Is the mode switch set properly at the "REG" position? |
| (4) No receipt is issued. | - Is the paper roll properly installed? <br> - Is there a paper jam? <br> - Is the receipt function in the "OFF" status? <br> - Is the print head release lever at the printing position? |
| (5) No journal paper is taken up. | - Is the take-up spool installed on the bearing properly? <br> - Is there a paper jam? <br> - Is the journal printing selected in the printing style programming? (If the receipt printing is selected, the paper is not wound around the take-up spool.) |
| (6) Printing is unusual. | - Is the print head release lever at the printing position? <br> - Is the paper roll properly installed? |

## Error code table

When the following error codes are displayed, press the (CL) key and take a proper action according to the table below.

| Error code | Error status | Action |
| :---: | :---: | :---: |
| E01 | Registration error | Make a correct key entry. |
| E02 | Misoperation error | Make a correct key entry. |
| E03 | Undefined code is entered. | Enter a correct code |
| E07 | Memory is full (in the AuTo key programming). | Program the Auto key within 25 steps. |
| E11 | Compulsory depression of the \#/TM/ST key for direct finalization | Press the \#/TM/ST key and continue the operation. |
| E12 | Compulsory tendering | Make a tendering operation. |
| E32 | No entry of a clerk code | Make a clerk code entry. |
| E34 | Overflow limitation error | Make a registration within a limit of entry. |
| E35 | The open price entry is inhibited. | Make a preset price entry. |
| E36 | The preset price entry is inhibited. | Make an open price entry. |
| E37 | The direct finalization is inhibited. | Make a tendering operation. |
| E67 | Subtotal void is not allowed. | Finalize the transaction, and correct the wrong entries in the mode. |

## SPECIFICATIONS

| Model: | XE-A201 |
| :---: | :---: |
| Dimensions: | 338 (W) $\times 425$ (D) $\times 290$ (H) mm |
| Weight: | 9.0 kg |
| Power source: | Official (nominal) voltage and frequency |
| Power consumption: | Stand-by 7W |
|  | Operating 34.5W (max.) |
| Working temperature: | $0^{\circ} \mathrm{C}$ to $40^{\circ} \mathrm{C}$ |
| Electronics: | LSI (CPU) etc. |
| Display: |  |
| Operator display: | 7-segment display (10 positions) |
| Customer display: | 7 -segment display (7 positions) |
| Printer: |  |
| Type: | One-station thermal printer |
| Printing speed: | Approx. 10 lines/second |
| Printing capacity: | 24 digits each for receipt and journal paper |
| Other functions: | - Logo message function |
|  | - Receipt (ON-OFF) function |
| Paper roll: | Width: $57.5 \pm 0.5 \mathrm{~mm}$ |
|  | Max. diam.: 80 mm |
|  | Quality: High quality ( 0.06 to 0.08 mm thickness) |
| Cash drawer: | 3 slots for bill and 7 for coin denominations |
| Accessories: | Manager key 2 |
|  | Operator key 2 |
|  | Drawer lock key 2 |
|  | Paper roll 1 |
|  | Take-up spool 1 |
|  | Bill separator 1 (Set in the drawer.) |
|  | Quick Start Guide 1 copy |
|  | Instruction manual 1 copy |

* Specifications and appearance subject to change without notice for improvement.

Use these labels with the department keys. Write department names on the labels and attach them to the department keys by first removing the transparent key covers. (Please make a copy of this page.)


## SHARP.

## SHARP CORPORATION


[^0]:    Note
    Do not attempt to remove the paper roll with the head in the down position. This may result

[^1]:    Note

    - Press the (CL) key after pressing the Ex key to cancel payment in a foreign currency.
    - If "Yes" is selected for cheque and credit operation when tendering in foreign currency in EURO programming, you can finalize a sale in foreign currency using the [CH, CR1 or CR2 key.
    - If programmed, a foreign currency symbol is printed when you use a preset rate.

[^2]:    Note
    You can manually make these settings. For programming details, please refer to "EURO Programming" section.

